THE Soybean Digest

OFFICIAL PUBLICATION • AMERICAN SOYBEAN ASSOCIATION

Irrigation well near Stuttgart, Ark.

MAY • 1955

VOLUME 15 • NUMBER 7

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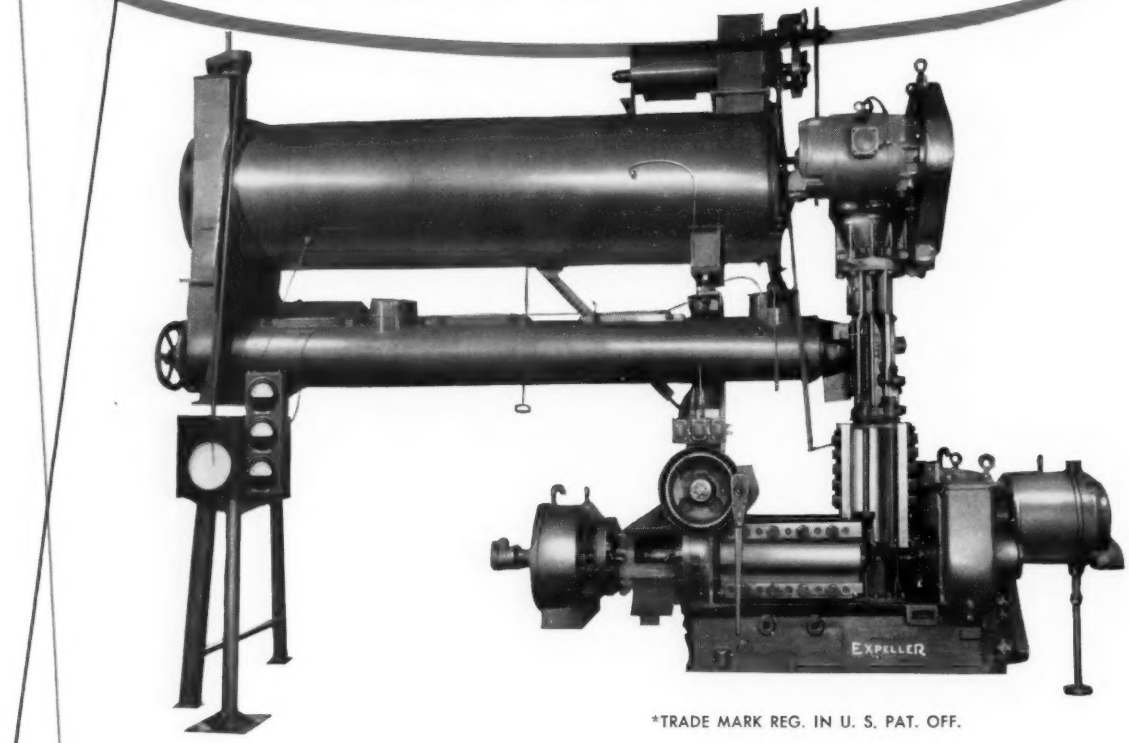

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Vol. 15 • May, 1955 • No. 7

IN THIS ISSUE

Editor's Desk 4
GEO. M. STRAYER

Growers 8

See Promise for Soybeans in Texas 10

More Soybeans Irrigated This Year 12
STAFF WRITTEN

Cover Picture 13

Late News 15

Commodity Trading 18
W. E. HUGE

Oil Mill Conference 20

Utilization of Fats and Oils 20
LYLE E. GAST AND HOWARD M. TEETER

Refining and Oil Color and Stability 20
R. E. BEAL

Countercurrent Fractionation of Vegetable Oils 22
LYLE E. GAST AND HERBERT J. DUTTON

Changes in U. S. Standards 24

Smalley Award Winners 25

Glidden's Lecithin Gains Sales 26

Publications 28

Weed Reports 28

Letters 31

Opens Plant at Chattanooga 32

Grits and Flakes 35

New Products and Services 38

Washington Digest 40
PORTER M. HEDGE

Market Street 41

In the Markets 42

April Markets 46

THE SOYBEAN DIGEST

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Objectives of the American Soybean Association include the bringing together of all persons interested in the production, distribution and utilization of soybeans; the collection and dissemination of the best available information relating to both the practical and scientific phases of the problems of increased yields coupled with lessened costs; the safe-guarding of production against diseases and insect pests; the promotion of the development of new varieties; the encouragement of the interest of federal and state governments and experiment stations; and the rendering of all possible services to the industry.

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EDITOR'S DESK

By GEO. M. STRAYER

BIG STEP HAS BEEN TAKEN The change recently announced, and effective Sept. 1, 1955, in the federal grades on soybeans is a signal victory for those forces which recognize the need for doing a better job of marketing our agricultural commodities. Every processor in the nation is going to benefit by the change. Every foreign buyer of American soybeans is going to benefit. In the end the man who will benefit most is the producer—the man who grows and markets the soybeans.

A year ago your editor was in the European countries as a member of the Agricultural Foreign Trade Mission sent by the Department of Agriculture. If any one thing was driven home to that mission it was that American agricultural commodities were not measuring up, and that we were losing our markets to other suppliers because of quality difference. On wheat, lard, soybeans and other commodities it was the same story, country after country.

No place in the world are soybeans produced so efficiently, and with so little investment in man hours, as in the United States. We have high oil content, low moisture, uniformity and general appearance. Oilseed crushers and foods manufacturers prefer our soybeans to any others —if they can get them on a *clean basis*. Our exporters have, in all too many cases, persisted in shipping the maximum allowable foreign material which the standards would permit. The permissible levels were too high. Effective Sept. 1 those maximums are to be brought down to more realistic levels.

Regrettably, the grading certificate issued by the Department of Agriculture has lost some of its value. There was a time when it was accepted the world over at face value. Not today! The buyer of wheat tells you in no uncertain terms that the U. S. grade certificate is no guarantee of what he is going to get.

On soybeans the problem is different. The buyer is actually purchasing oil and meal, except for those buyers for production of flour or other foodstuffs. We can restore confidence in the U. S. grade certificate if grower, handler and exporter will cooperate in supplying the very best quality soybeans—and will ship them *clean*. Sticks, stems, pods, dirt, sand, corn, wheat screenings and other foreign materials do not make soybean oil. Neither do they make soybean meal.

Soybean processors in the U. S. have been buying on U. S. No. 1 basis because foreign material allowances in No. 2 beans were too high. Now they will get the same beans by buying No. 2's. Freight, handling costs, wear on equipment and spoilage due to foreign material pockets will be reduced. More usable product will be produced from a bushel of beans.

We have taken a big step forward. There are others that should come. We must reclassify broken particles of soybeans, taking them out of foreign material and placing them in the split bean classification. We must institute a system of premiums for low moisture content, just as we today have discounts for high moisture. We must arrive at some system of color differentiation for those buyers who must have yellow soybeans. Our job is not done—it is just well started!

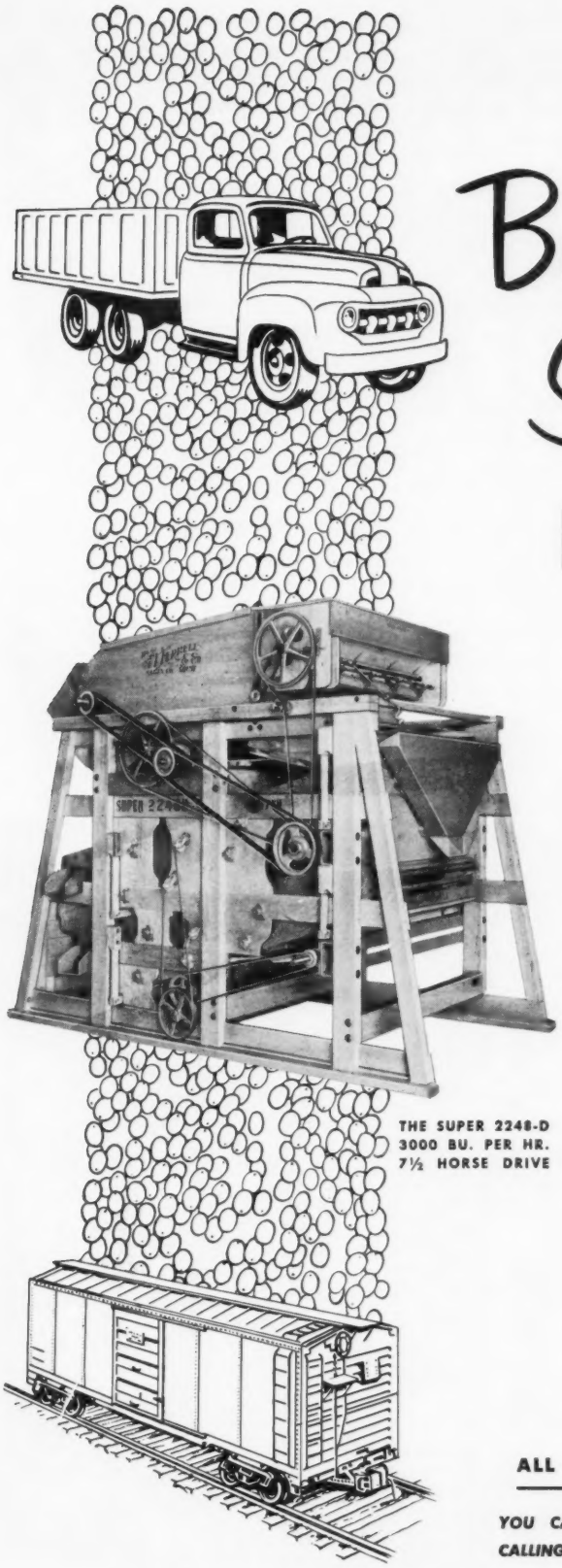
MOISTURE PREMIUM LOGICAL The price which can be paid for a bushel of soybeans is dependent on the value of the end products from it. Unquestionably a bushel of beans containing 10 percent moisture produces more oil and more meal than a bushel of soybeans containing 14 percent moisture. And more than one containing 17 percent moisture.

Why not pay more for that bushel of soybeans that yields more pounds of oil and meal? Why penalize the man who delivers dry beans? When they handle, store and process better than the wet beans? If a 5-cent-per-bushel discount on soybeans containing 15 percent moisture is logical, then is it not just as logical to pay a premium of 5 cents per bushel on 13 percent moisture beans?

The total crop would bring little more to producers. But the individual producer who marketed fewer pounds of lower-moisture-content beans would not be subsidizing the man who brought more pounds of higher-moisture beans to market.

The change in foreign material becomes effective Sept. 1. Let's change our buying practices on that same date, applying both premiums and discounts on moisture above and below the No. 2 standards. It will cost processors and soybean handlers nothing, but it will equalize the differences between producers. It is important to the encouragement of production of quality soybeans.

We suggest to soybean processors that they take the lead in announcing a premium and discount basis of buying. Or, would processors prefer that growers use the water tank and market only 14-percent-moisture soybeans? Without premiums it would pay many of the best producers to do so. Selling water at soybean prices is still a very profitable enterprise—even at today's soybean prices!



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WHY NOT BUY BEANS ON CLEANED BASIS? The day when the country handler of soybeans can ship all his purchases into market channels without loss is now past. Starting Sept. 1 it is going to be increasingly important to have adequate recleaning equipment available at the country handling level. It must be of such size, capacity and design to handle the proportion of the crop which must be cleaned before it goes into market channels.

No longer is it going to be possible to take every load of beans as it comes from the field, elevate it into a car or truck, and send it on the way to market. The soybean buyer is going to become a grain merchant, and he is going to be equipped to clean, store and handle efficiently or someone so equipped will take over his business.

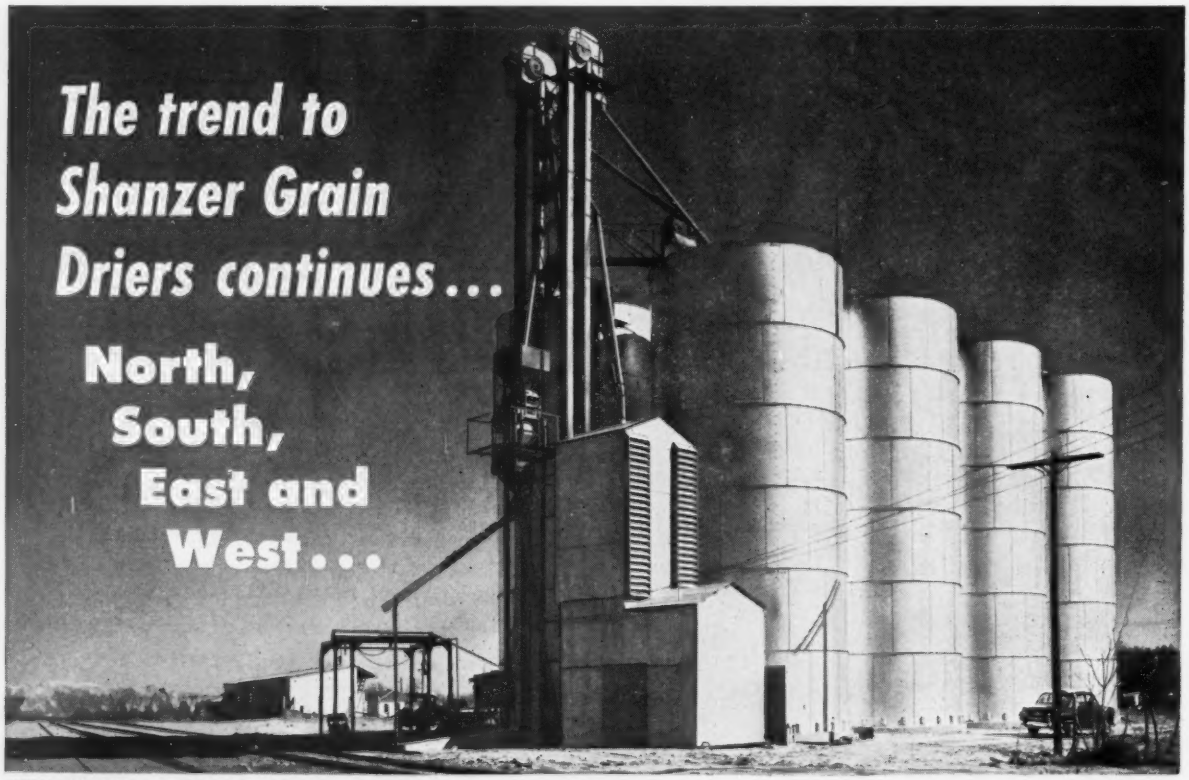
Why not reclean dirty lots of soybeans, paying for them on the clean basis? It is done on other crops. It would soon discourage marketing of dirty soybeans. And it is the *only* way a soybean buyer can be sure he is not going to take a loss.

It not only costs money to handle and store foreign material, but it creates difficult storage problems. Small pockets of extraneous material have caused spoilage of more than one bin of otherwise good soybeans!

Soybean buyers will do well to start planning and preparing now for next fall's harvest. If cleaning equipment is not adequate there are several months to prepare. September will be too late!

PREMIUM FOR ILLINOIS, MINNESOTA Announcement by the New Orleans Public Elevator that Illinois soybeans will be pooled and stored separately from beans of any other origin, and that Minnesota soybeans will be treated similarly, and that all soybeans originating elsewhere will be pooled together as **ORDINARY** soybeans is an interesting development! For instance, the Hawkeye variety originated in Iowa. It is one of the major varieties grown in Illinois. Are Hawkeyes grown on the west bank of the Mississippi river less valuable than those on the east bank? At the same latitude? Some Illinois points are much farther west than some other Iowa points within the Hawkeye production area.

The order apparently was issued in an effort to meet demands of buyers for soybeans yellow in color, high in oil, and relatively free of foreign material. It will be interesting to follow the market developments from this point forward. We will try to keep you informed.



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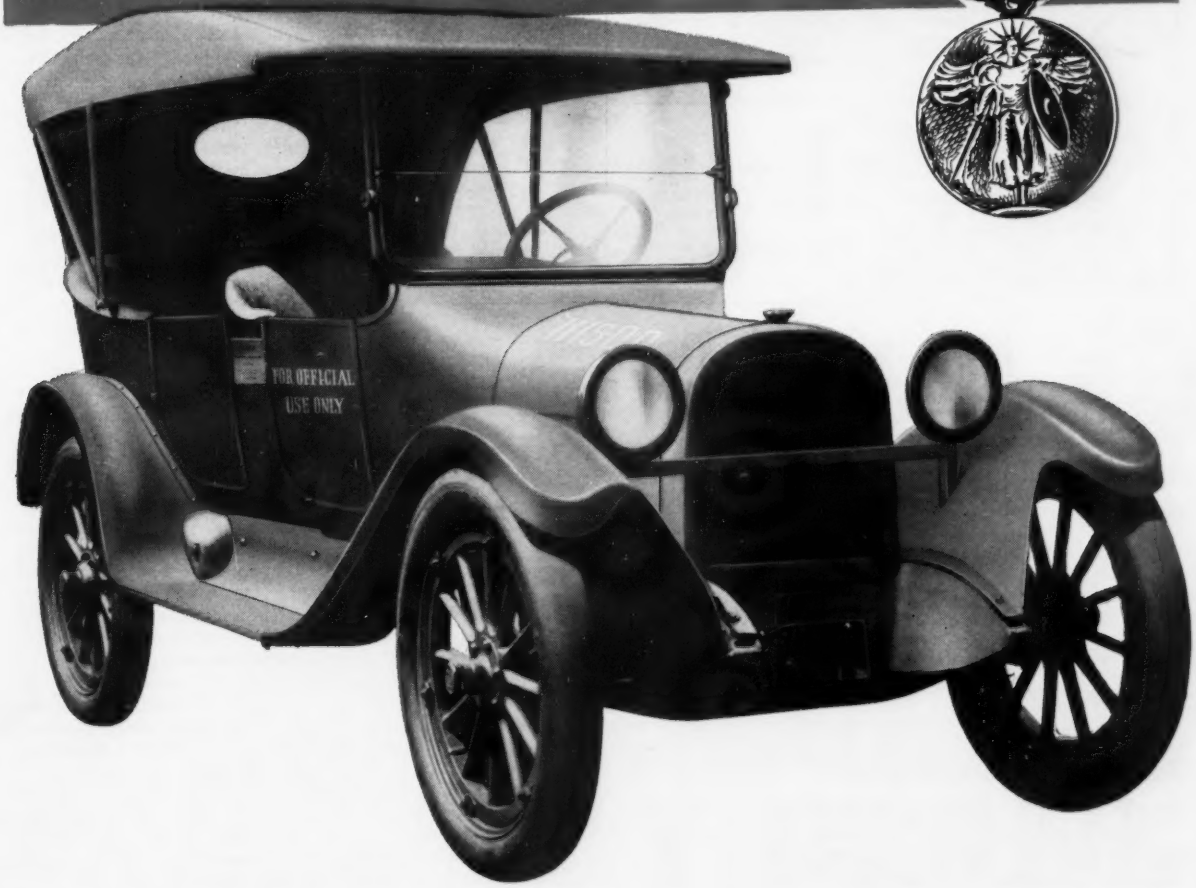

This Dodge is the first passenger car used by the U. S. Army as a combat vehicle. It accompanied General John J. Pershing on the 1916 Mexican Expedition, and at one time was driven by a young lieutenant named George S. Patton! The old car still runs beautifully, 40 years since it saw the smoke of battle.

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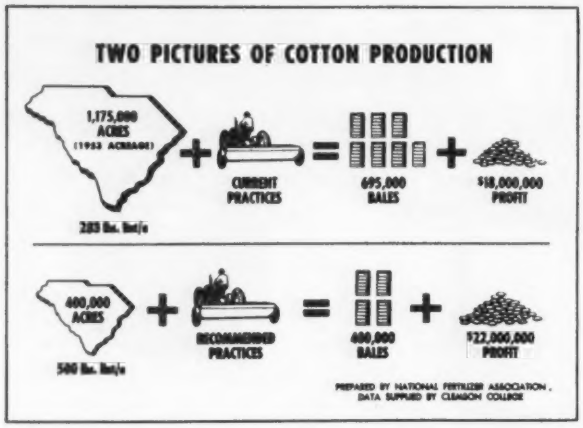

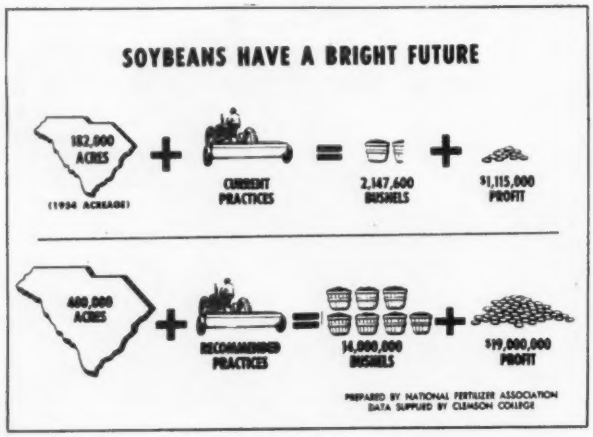

—Courtesy Commercial Fertilizer

How to Double Profits

HOW SOUTH Carolina farmers could increase their soybean acreage, decrease their cotton acreage, and double their profits is shown in the above pictographs.

They were used in a talk by W. R. Allstetter, vice president of the National Fertilizer Association, before the South Carolina Plant Food Educational Society.

Allstetter called attention to the tremendous opportunity for increased profits in soybean production. Under average conditions, South Carolina farmers now realize about $6 per acre profit from soybeans which presently are planted on only about 182,000 acres. By following Clemson College recommendations, profits per acre would skyrocket to nearly $50 per acre.

Allstetter pointed out that South Carolina farmers could afford to raise a much smaller cotton crop than at present and still make a higher profit—provided they would make proper use of fertilizer and other good farming practices.

Virginia Planting Dates

EXPERIMENTS conducted at the Eastern Virginia Research Station at Warsaw during the past four years have shown that soybeans yield best if planted between May 25 and June 10, state H. M. Camper, T. J. Smith and M. P. Lacy of the Virginia Agricultural Experiment Station in the Southern Planter. It was also found that soybeans yielded as well in three-foot rows as they did in one-foot or two-foot rows, and three-peck seeding rates were equally as good as five or seven-peck seedings.

This experiment was started in 1951 and was designed to answer some of the questions on soybean production that have been problems to Virginia soybean farmers for many years. Two soybean varieties, Ogden and S-100, were included in this comprehensive experiment.

Seedings were made at 15-day intervals from May 10 to July 10. Three-row spacings, one foot, two feet, and three feet, and three rates of planting, three pecks, five pecks, and seven pecks, were used for each planting date.

On the basis of the information obtained from this test, planting dates between May 20 to June 15 are considered the best for soybeans in the northern coastal plain area. After June 15 yields were reduced, and yields obtained from seedings in July were not only low but seed quality was generally poor.

The quality of Ogden for the late seeding was especially low due to frost injury. The early seeding date gave comparable yields. However, weeds were harder to control and in some years stands were reduced apparently by low soil temperature.

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The planting rates had little effect on the average yield in the case of Ogden. The seven-peck rate was considered too high due to excessive lodging for both varieties.

Three-foot row widths gave average yields equal to the one-foot and two-foot row widths.

Each 15-day interval in planting delayed the maturity of Ogden approximately 7 days and S-100, 10 days. Ogden soybeans planted on May 25 matured about Oct. 20 and S-100 about Oct. 1.

Price Favors Soybeans

ILLINOIS farmers who can raise either corn or soybeans have more reason to comply with corn acreage allotments this year than last, according to a farm economist at the University of Illinois.

P. E. Johnston explains that if you don't stay within corn acreage allotments, you can't put your corn under loan. So the question is what will corn be worth on the open market compared with what soybeans on the same ground would be worth.

This year the price relationship between corn and soybeans favors staying within allotments for corn and putting diverted acres to soybeans.

If you have 80-bushel corn land, you can normally expect it to grow 30 bushels of soybeans. You can make the same net income from 30-bushel soybeans at $2.04 a bushel as from 80-bushel corn at $1.40. Most experts, Johnson says, think $1.40 is all you can expect from corn in the open markets.

If you can get 35-bushel soybeans, they have to bring only $1.77. Of course, Johnston says, if you expect higher soybean prices or lower corn prices, you would be that much better off with soybeans.

Sixty-bushel corn selling at $1.40 a bushel gives the same net income as you would get from 30-bushel soybeans at $1.57, 25-bushel soybeans at $1.84 or 20-bushel soybeans at $2.27.

Forty-bushel corn worth $1.40 a bushel will return the same as 25-bushel soybeans at $1.28, 20-bushel soybeans at $1.57 or 15-bushel soybeans at $2.04.

Use of Chemicals

WHERE annual weeds such as crabgrass, pigweed and annual morning glory present early-season weed problems the use of chemicals in control of weeds in soybeans may be warranted under Mississippi conditions, according to Mississippi Farm Research, Agricultural Experiment Station, State College, Miss.

For trial use a pre-emergence application of CIPC at planting time is recommended where crabgrass and *Brachiara* species are troublesome, according to Farm Research.

Dosages should be one to one and one-half pounds per acre on a 12-inch band basis. The pre-emergence treatment is not recommended for use on heavy clay soils such as Buckshot, Houston, etc.

A single directional spraying with one of the herbicidal oils recommended for cotton has given good control of most young annual weeds in soybeans when applied correctly and at the proper time.

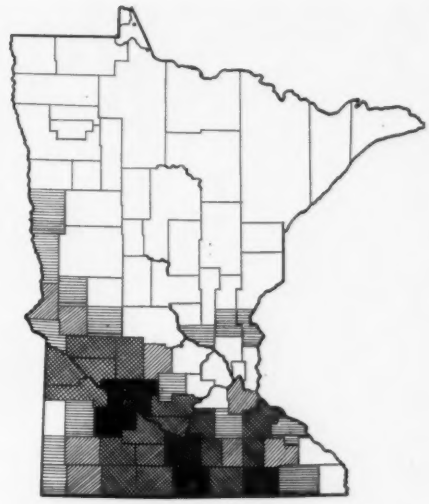
The commercially available herbicidal oils that have performed satisfactorily for several years in field tests on cotton are City Service No-Weed Oil No. 1; Esso 38; and Lion Herbicidal Oil No. 1.

An oil treatment of five gallons per acre when the soybeans are from 12 to 16 days past emergence and applied exactly as prescribed for use in cotton, is recommended where no pre-emergence chemical is used and an early annual weed problem exists. Under no conditions should the rate of five gallons per acre be exceeded.

Best Return by Beans

Soybeans brought the greatest dollar return per acre of grain and oilseed crops in North Dakota during the past five years, according to Cargill News.

The five-year average value of production of soybeans was $33.17 per harvested acre, compared with $32.15 for corn and $27.83 for flax.



MINNESOTA soybean production by counties, 1953 crop. Counties in white, less than 100,000 bushels; horizontal lines, 100,000 to 300,000 bushels; slanted lines, 300,000 to 500,000 bushels; cross lines, 500,000 to 1 million bushels; black, over 1 million bushels.

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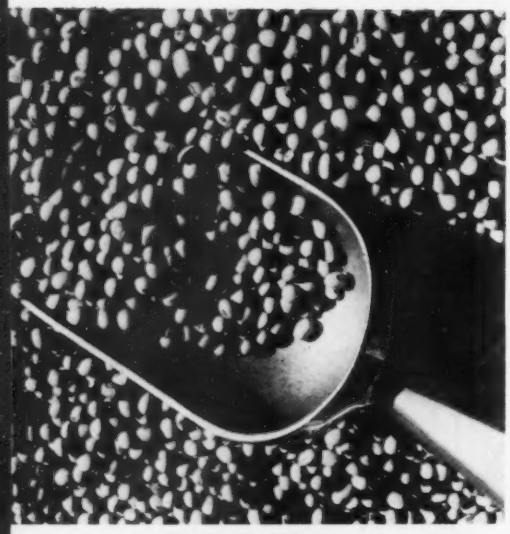

THESE SOYBEANS grown in Texas at the Renner station of Texas Research Foundation were grown under severe drouth conditions, with an average acre yield of approximately 20 bushels.

See Promise For Soybeans In Texas

NEW STRAINS of soybeans developed at Renner, Tex., plus mid-June planting may solve the 20-year-riddle of soybean failure in this state, Texas Research Foundation plant scientists have announced.

"A 10-year research program of soybean testing and breeding at Renner has produced new strains which, when planted around June 15, offer bright promise as a profitable new cash crop for Texas," Dr. C. L. Lundell, director of the Foundation, said.

"We believe Renner-developed varieties will be ready to release to blackland farmers by June 1958. After two more years of testing, the beans will go to selected growers for seed increase in 1957."

He revealed that preliminary tests at Winona and Henderson in east Texas indicated that Renner-developed strains also could be adapted to that region. He thought an east Texas commercial soybean crop might be possible by 1959 or 1960.

Widely Adapted

"In fact, we believe that Renner developed strains can be adapted to most of the regions of the state, thereby giving Texas farmers an opportunity to sell on the nation's $800 million annual soybean market," Dr. Lundell said.

Dr. E. H. Collister, agronomist and head of the Foundation's field crops department, said yields of the Renner-developed strains compared favorably with the national annual average of 19.9 bushels an acre during the 10-year period 1943-52.

"The Foundation's highest yielding variety, R46-2807-6, has given 19.02 bushels an acre at Renner, even in the adverse north Texas weather during recent years," he said.

"The east Texas test at Winona, with a planting date of June 8, gave a remarkable yield—33.05 bushels an acre. The only moisture the stand had was an inch of irrigation water applied by overhead sprinkler."

With anything like a good growing season, Renner - developed strains will surpass the national average in yields, he thought.

Dr. Collister said the highest yielding northern strain gave only 12.90 bushels to the acre in the Renner tests. "That is typical of the performance of the northern varieties in this climate. Texas is too dry for them," he added.

Late Planting Dates

He cited several advantages of the late planting date in Texas. First, the beans usually escape most of the summer drouth and high temperatures during blooming and seed development.

"The resultant favorable temperatures and moisture conditions make for higher seed quality," he explained.

"Late planting generally reduces injury from insects and disease, particularly root rot. It also makes for easier weed control, as weeds can be killed before planting time."

Another late planting advantage is that farmers can sow soybeans after winter grain and legumes, if moisture is favorable.

In addition to these two current regional tests, similar testing programs are being planned for the High Plains of west Texas and for the Coastal Bend section of south Texas, for Foundation plant scientists believe that some of the Renner-developed strains will thrive in those areas, particularly where supplemental irrigation can be used.

Dr. Collister reports the program to date has produced 40 new strains.

"We believe that among these 40 strains there are some that will be found to be adapted to most of the major soil types of Texas," Dr. Collister said.

Dr. Lundell said the Foundation's research program had been started with the objective of finding strains that would flourish and provide a profitable crop in the Southwest.

"We discovered the effectiveness of the late planting date early in the program. By 1950, the evidence was so strong we switched to the mid-June dates entirely," he concluded.

Reduces Trading Margin

Chicago Board of Trade Secretary Robert C. Liebenow has announced a reduction in the minimum margin requirements on soybean futures contracts effective Wednesday, Apr. 6. Initial requirements have been cut from 30 cents to 25 cents per bushel and maintenance and hedging and spreading transaction margins were reduced from 25 to 20 cents per bushel.

He also announced that approval had been granted by the directors of the Board of Trade by which space amounting to 25 million pounds is now regular for delivery on crude soybean oil at the plant of the Honeymead Products Co., Mankato, Minn.

Swift's Ohio Conversion

SWIFT & CO. Soybean Mill at Fostoria, Ohio, is Swift's most recently completed conversion, and now employs the solvent instead of the Expeller process. New utility building is in the foreground.

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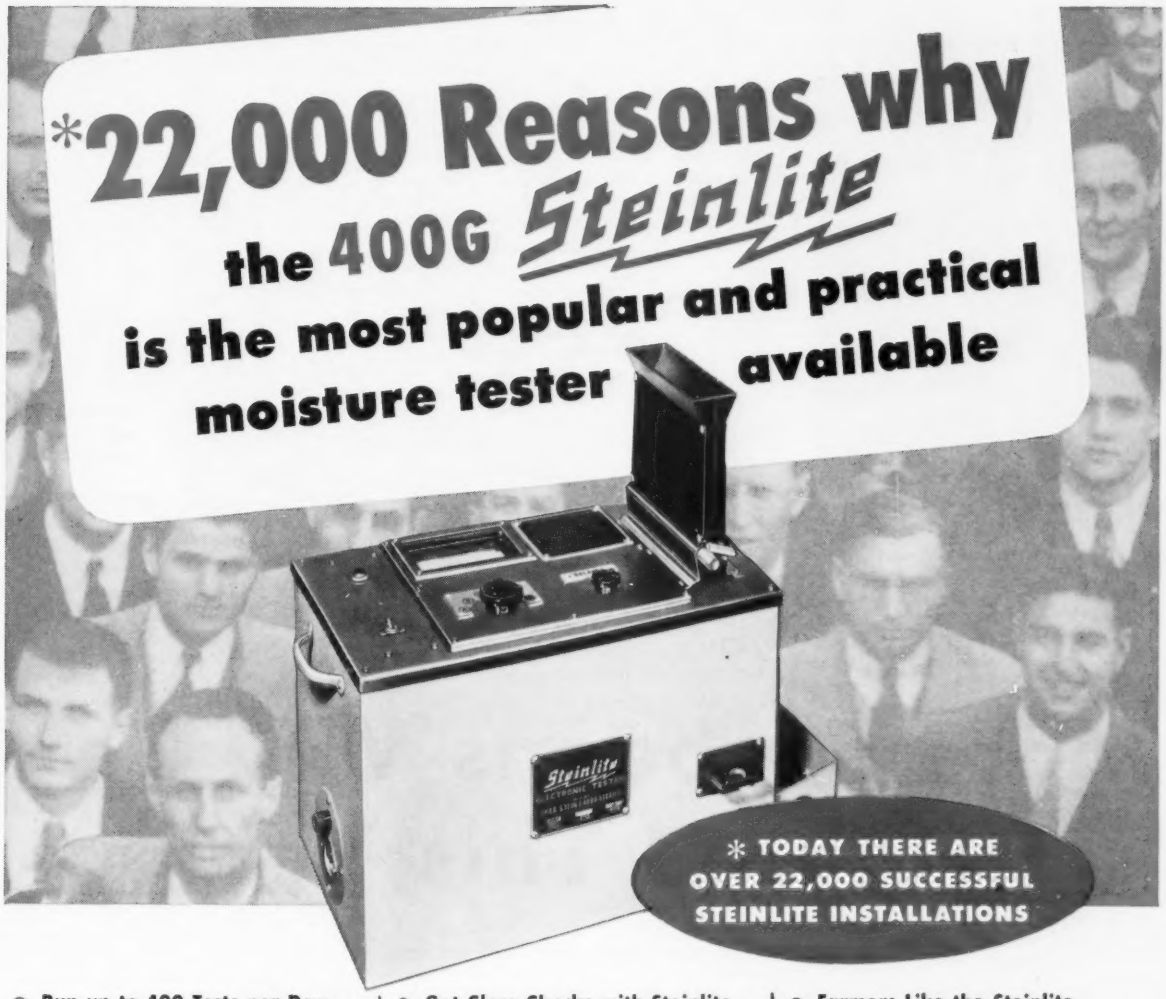
the 400G Steinlite is the most popular and practical moisture tester available



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We are getting very close checks here in Topeka, with a 400G on our moistures, and are very happy about it. We tried other testers but they didn't quite fill the bill so we returned them.

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With a record of 75% of our recent tests within .3% variation, and the remainder on the nose to show our farmer customers, you can see that I am a satisfied Steinlite customer.

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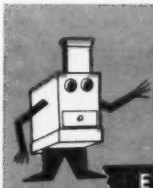

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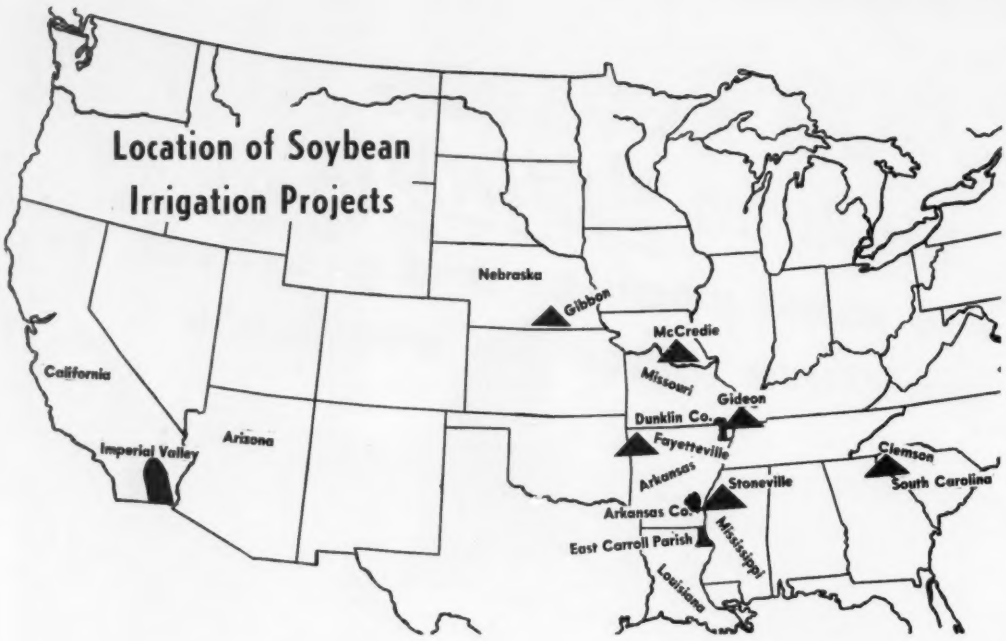


More Soybeans Will Be Irrigated This Year

Irrigation is not only crop insurance— it is a key to bigger crops. Do soybeans fit into the irrigation picture?

(Staff Written)

WEATHER experts say we are in a dry cycle that may run for several more years. The dry weather is resulting in a great upsurge of interest in crop irrigation.

U. S. farmers spent $55 million on sprink'er systems alone last year plus "a lot" on surface irrigation, according to Better Farming. We are now irrigating about 3 million acres of farm land. The acreage increased by about 25 percent last year.

Farmers have begun to look on irrigation as necessary drought insurance. But more than that, they are beginning to look on it as a key to higher level production, Better Farming points out. They will pour on water and fertilizer according to the capacity of the soil and watch the yields jump.

Interest in irrigating soybeans has not come as early as in some other crops which are adapted to a more intensive type of farming. Soybeans do not make as high a return per acre as most irrigated crops. And they have been thought to be drought resistant.

But during the recent dry seasons in much of the South and in the western edge of the bean belt soybean yields have been disappointing and this has tended to dampen the enthusiasm for the crop. Some farmers have been turning to irrigation.

A not insignificant soybean acreage wi'l be under irrigation this year if we have a dry season, particularly in Nebraska, Arkansas and Missouri. And some acres will be irrigated in Arizona and California.

About 30,000 acres were irrigated in Nebraska in 1954 and the acreage may be larger in 1955. Acreage in other states has been much smaller—1,300 acres in Missouri last year for instance. But we are told that close to 100 farmers in one Missouri county alone may irrigate this year.

Irrigation produced some big jumps in soybeans yields in 1954. At Clemson (S. C.) Agricultural College irrigation raised the yield from 7.3 bushels to 32.7 bushels per acre. Total rainfall at Clemson was only 8.7 inches, or 29 percent of normal last year.

Yields in south Arkansas County, Ark., were raised from 6-8 bushels to 25-50 bushels through irrigation.

In southeast Missouri irrigation increased yields from 9 to 32 bushels per acre.

In the University of Nebraska test plots at Gibbon four irrigations raised the yield from 27.9 bushels to 42.8 bushels per acre.

A roundup of information on progress with irrigation:

South Carolina. There was plenty of interest in irrigation in South Carolina last year. Fifty carloads of farmers turned out for a tour of irrigated fields in one county.

Louisiana. Two vast irrigation districts are being formed in East Carroll Parish to irrigate some of the finest crop land in the Delta. Undoubtedly soybeans will be grown on some of it.

Arkansas. Soybean yields in south Arkansas County increased 250 to 500 percent with irrigation, according to Frank Ellis, county agricultural agent, in Delta Farm Press.

About 30 percent of the soybeans in south Arkansas County were irrigated from one to three times with the furrow and levy method. Yields were increased from 6-8 to 25-50 bushels, Ellis said.

The irrigated soybeans were also worth more per bushel. Wholesale seed dealers paid 50 cents to a dollar more for irrigated beans, which are tops for seed purposes.

But results of irrigation tests at the Arkansas Experiment Station plots at Fayetteville were disappointing due to extremely high temperatures in July and August. There were 29 days in those two months when the temperature was above 90 degrees. A total of 14 inches of water was applied in five different applications in addition to a rainfall total of 10.86 inches in the April-through-August period.

But irrigated Dorman beans yielded only 6.81 bushels per acre compared with 3.66 bushels for non-irrigated Dormans. Later maturing Ogden and Lee varieties had to be cut for hay because of poor seed set. The irrigated beans made three times as much forage as the non-irrigated beans.

Missouri. A 1954 irrigation survey by J. Ross Fleetwood and D. M. Whitt of the field crops department of the University of Missouri indicated that 29 farmers irrigated 1,271 acres of soybeans last year in nine counties north of the Missouri River and eight counties south of the river. They applied on an average 3.8 inches of water and the number of irrigations was one to five. Yield increases ranged as high as 20 bushels per acre, but averaged 11.1 bushels for the farmers who reported. All said they would irrigate this coming year.

Total number of farmers irrigating all crops except rice in Missouri last year was 155, and the total acres irrigated was 12,367. All planned to irrigate again in 1955. Those who said irrigation did not pay started too late in the season or quit too early.

Eighty-four percent of the irrigation was done by sprinklers, 10 percent flooded the fields, and 6 percent used the furrow method.

At University of Missouri's McCredie Field 14.16 inches of irrigation water boosted yields of Clark soybeans from 11.8 bushels per acre to 23.8, and the yield of Lincolns from 12 to 27.4. The McCredie Field is on Mexico silt loam, a claypan soil.

At Campbell Field in the Mississippi River Delta of southeast Missouri 12.75 inches of irrigation water raised the yield of Ogdens from 9 to 32 bushels, and Dormans from 7.2 to 23.8 bushels per acre.

In Dunklin County, where Campbell Field is located, farmers tried irrigation mainly on corn and cotton last year. But Joe H. Scott, Jr., county extension agent, estimates that close to 100 farmers will irrigate soybeans in the county this summer unless there is an abundant supply of moisture.

Don Thomason at Kennett, in Dunklin County, irrigated some Perry soybeans on clay soil in 1954 and got an eight-bushel increase. There were two applications averaging two inches each by sprinkler.

Gideon Anderson Farms at Gideon applied 12 inches of water in three applications in July and August to Perry soybeans on sand ridge. The irrigated beans yielded 32.23 bushels per acre and the non-irrigated beans 5.48 bushels. Both were adjusted for moisture and dockage.

Mississippi. P. H. Grissom, agronomist at the Delta Branch Experiment Station, Stoneville, Miss., stresses that other practices for high production must be used along with irrigation in the Delta.

1—You must apply the fertilizer needed to get high yields.

2—On cotton at least you will have to step up insect control.

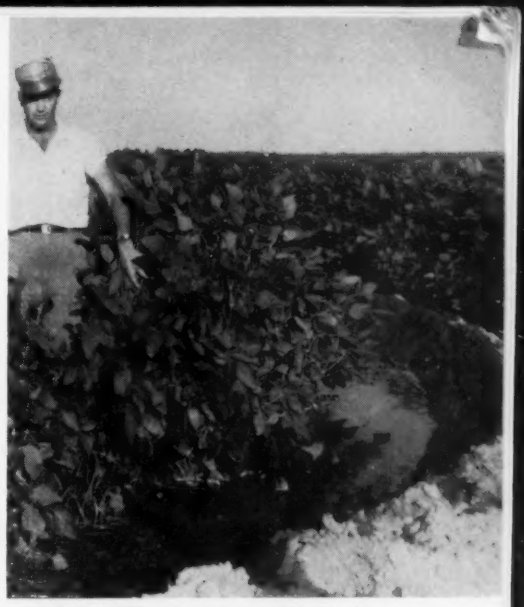
Nebraska. Four applications on the University experiment plots at Gibbon increased the yield of 19-inch rows from 27.9 bushels per acre to 42.8 bushels, says Donald G. Hanway. In 38-inch rows the yield increased from 25.7 to 39.4 bushels per acre.

Arizona, California. Nine hundred and fifty acres were planted to soybeans in the Imperial Valley of California last year, and 90 acres in Arizona, for increase only.

This year there is enough seed of the Lee variety to plant 4,000 acres in Arizona, but farmers have applied to the Arizona Crop Improvement Association for seed to plant 7,000 acres, according to Arizona Farmer-Ranchman. California has enough registered seed to plant 15,700 acres but it is not known if that many will be planted.

Since this will be the first year for soybeans to be grown commercially in Arizona, the future of the crop there depends on its success or failure this year.

If the venture is successful, soybeans will probably replace some of the cotton acreage in the state, states H. E. Jacka, secretary-treasurer of the Arizona Crop Improvement Association. It is conceivable that 50,000 acres could be in soybeans in the state in 1956, he says. To date the Lee soybean has proven the most satisfactory for the state's climate with very little shattering.



IRRIGATED soybeans on the R. B. Oliver farm near Stuttgart, Ark.

With the exception of a very small part of the state, everything grown in Arizona is under irrigation.

Yields on the small acreage last year averaged a little over 20 bushels to the acre, with some making only 9 and one making 43 bushels per acre.

Suez Traffic Same

SUEZ CANAL traffic in soybeans, presumably Chinese, in 1954 of 352,000 short tons (about 11.7 million bushels) was about the same as the 1953 northbound movement, according to information available to the Foreign Agricultural Service. This quantity, however, is only about one-fourth the average quantity of soybeans moving through the Canal in the prewar years.

Vegetable oils also passed northward through the Suez Canal in smaller volume; the total movement of 374,000 tons last year representing a decrease of 28 percent from 1953.

SUEZ CANAL: Northbound movements of vegetable oilseeds, 1954 with comparisons
(1,000 short tons, gross weight (1)

Oilseed	Average 1933-37	1951	1952	(2) 1953	(2) 1954
Soybeans	1,237	551	219	353	352
Copra	786	1,066	795	660	844
Peanuts	999	218	207	229	250
Cottonseed	146	195	144	197	153
Flaxseed	227	42	34	55	31
Other	267	224	289	417	316
Total oilseeds	3,662	2,296	1,688	1,911	1,946

(1) Source data in metric tons. (2) Preliminary. Source: Compiled from Le Canal de Suez bulletin, Paris, France.

THE COVER PICTURE

Cover picture shows an irrigation well on the farm of R. B. Oliver near Stuttgart, Ark. It delivers 2,200 gallons of water a minute and irrigates soybeans, rice and other crops on Oliver's 420-acre farm.

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AMERICAN SOYBEAN ASSOCIATION

Late News

Vol. 3, No. 7

Hudson, Iowa, May 6, 1955

Published 32 times yearly as a service to the soybean industry.

PLANTING IS UNDER WAY

Planting of the 1955 soybean crop is progressing in the South, with 5 to 10 percent of the acreage planted in Arkansas areas, up to 25 percent in parts of Louisiana and Mississippi, and 50 percent in eastern North Carolina by May 1.

The size of the 1955 soybean acreage is still to be settled. Producers haven't made up their minds. Weather and the action of the market can still change the total. **Our reports still tend to shave U. S. Department of Agriculture's Mar. 1 planting intentions report in the upper Midwest, and possibly push it up a little in the South.**

Disappointment with recent markets and the price support level, and favorable weather this spring for planting small grains will shrink the acreage somewhat in the North. Restrictions on cotton and rice acreage and loss of small grain due to March freezes may boost the acreage in the South. **A spurt in prices between now and planting time or unfavorable weather for planting other crops could still cause a spurt in bean acreage.**

Writes Jake Hartz, Jr., Stuttgart, Ark., who sees a 15-percent increase in his area: "We still feel that a general increase of 10-15 percent over the South will be experienced. But farmers are so undecided their opinions could be changed in a hurry."

Louis Brewster, General Mills, Inc., Rossford, Ohio, sees a slight increase in acres in northern Ohio but perhaps not quite as much as the 10 percent increase indicated by USDA, due to the falling cash market and the ability of farmers to get in a large oat crop this spring.

Floyd Poyzer, Amenia Seed & Grain Co., Amenia, S. Dak., sees a 50 percent increase in soybean acreage in the south central Red River Valley of North Dakota due to decreased wheat acreage and lower support prices on other grains. Nebraska and South Dakota also look for large percentage increases.

K. A. Standing, Ontario Soybean Growers Marketing Board, Chatham, sees a **10-percent drop in soybean acreage in southwestern Ontario this spring due to depressed prices.**

STOCKS REPORT

Crushing of soybeans in March was off a little, as the total crush was only 19.5 million bushels compared with 19.8 million for the shorter month of February, U. S. Department of Agriculture reports. The crush for the October-March period was 125.9 million bushels, less than 5 million bushels above the 121.2 million crushed in the same period a year ago.

A total of 40.5 million bushels was exported through March as against 31.5 million last year, according to USDA.

Supplies of soybeans remaining for processing, export or carryover on Apr. 1 totaled 150.2 million bushels, or **50 percent higher than a year earlier. Stocks at processing plants had slipped down to 17.5 million bushels Apr. 1, only about one-third of the five-year average for that date.** Soybean stocks in Chicago elevators were only 160,000 bushels Apr. 23, the smallest since September 1952. On the same date open interest in May future totaled 21 million bushels. (For the complete report on stocks and processing operations see page 45.)

CCC-HELD SOYBEANS

Leslie Commodity Letter estimates 36.3 million bushels still under price support Apr. 15. Trade News Service, New York, see Commodity Credit Corp. falling heir to substantial quantities of soybeans after May 31, probably greater than the prospective carryover of the 1954 crop into next year. But Trade News Service questions whether this will affect the market much as **CCC will be determined to dispose of any beans it takes over, either in the domestic or export markets.**

MARKET MOVEMENT

Reports are that beans have been moving in somewhat greater volume, in fact plenty to supply current demand, and processors are getting enough on which to operate.

J. E. Johnson, Champaign, Ill., writes that growers are not selling beans readily but shipments from elevators have been heavy and would be more if boxcars were available.

Disappointment among producers is keen at their failure to achieve a market rise. There have been many statements that growers "missed the boat" by withholding the crop this year, that they missed the chance to sell at a good price.

Some observers disagree. J. C. Fulde, D. A. Stickell & Sons, Inc., Hagerstown, Md., believes if growers had marketed a large part of the crop the first month or so after harvest, the price would cetainly have gone lower, perhaps below the government support price.

J. M. Ragsdale, University of Missouri extension economist, says **farmers have done a "remarkable" job of marketing the 1954 crop.** He points out that last year on a much smaller crop the price went 24 cents below support level at the low point, while this year it has always been well above support.

Ragsdale believes **prices may rise moderately during the balance of this marketing year, but he sees no prospect of a sharp rise like we had last year.**

MOISTURE CONDITIONS

Moisture conditions are better over the soybean belt in general than they have been for several years, including many of last year's drought areas. Exceptions are southern Illinois and the western edge of the belt, from the Dakotas south.

MISSOURI MILK BILL

The so-called "fluid milk" bill was killed in the Missouri House Apr. 27, apparently ending danger of passage this session. The bill could have ended all usage of cottonseed and soybean oil products in Missouri when combined with milk.

ASA-NSPA CONVENTION

It is not too early to be making plans—and reservations—for that big joint American Soybean Association-National Soybean Processors Association convention in Cincinnati. Remember the place and dates: Netherland Plaza Hotel, Aug. 29-31.

	Cash price to farmers for No. 1 soybeans Apr. 29	Price to farmers for No. 2 soybeans Apr. 29	Price to farmers for bagged soybean oil meal Apr. 29
Ark.		2.20	
Ill.	$2.42@$2.44	2.40	$67 @ $80
Iowa	2.25@ 2.38	2.35	75 @ 82
Kans.	2.32	2.43	74.50 @ 77.50
Miss.		2.25	
Mo.	2.36@ 2.50	2.40	77.60
Nebr.		2.28	
N. C.	2.45@ 2.50	2.40	80
Ohio	2.34@ 2.40	2.33	84
Va.	2.35	2.30	
Ontario		2.10	

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COMMODITY TRADING

Producers are carrying the overwhelming bulk of the price risk on the 1954 crop

By W. E. HUGE

Vice President, Central Soya Co., Inc. From a talk before the annual election of the Memphis (Tenn.) Board of Trade.

MOST PERSONS would undoubtedly deny that they have ever had any part, either directly or indirectly, in underwriting commodity price risks, or as it is commonly known—commodity speculation.

The bulk of our population has at times indirectly participated in commodity speculation by other means than through the futures market.

Soybeans and soybean product prices on several occasions have been affected by actions of groups not normally considered speculators.

Early in 1950 prices of fats and oils were under pressure because of large inventories and prospects of a record soybean crop.

Korean War

As the public gradually acknowledged that the venture in Korea was a war, rather than a police action, there followed a series of scare buying waves. The major products of vegetable oils, margarine and shortening, were not overlooked in this scramble for consumer goods.

With this impetus, soybean oil advanced from a pre-Korea price of 12 cents to 15 cents per pound in October 1950; advanced further after each reverse in Korea, and reached 21½ cents in January 1951. A ceiling of 20½ cents established on Feb. 13, 1951, determined the going price for the next three months.

The scare buying at home was supplemented by heavy purchases by European countries, primarily the result of a very poor olive crop in the Mediterranean Basin; but there was some reason to suspect here, too, that scare buying provided some impetus.

Eventually the cold realities of supply and demand asserted their influence. In spite of continued heavy exports the balance of the 50-51 season, supplies accumulated in sufficient quantity to drive the price down in September to 13½ cents before new crop supplies were available.

The activities of this consumer group undoubtedly were motivated more by fear of shortage than ambition for profit, but subsequent events proved these shortage fears groundless. At the close of the crop year, after the buying stimulated by hysteria was completely satisfied, supplies still exceeded the totals of the previous year.

These wide price swings are an example of the economic power of a consumer group, who in 15 months carried a price from 12 cents to 21½ cents and then allowed it to fade back to 13½ cents.

Price of Meal

We saw a similar force exerted last year by the consumer group affecting the price of soybean meal. Supply and demand was recognized by consumers as being out of balance. The thermometer, price, recorded this disparity. The resulting high price also produced its own antidote—reduced demand and increased supply.

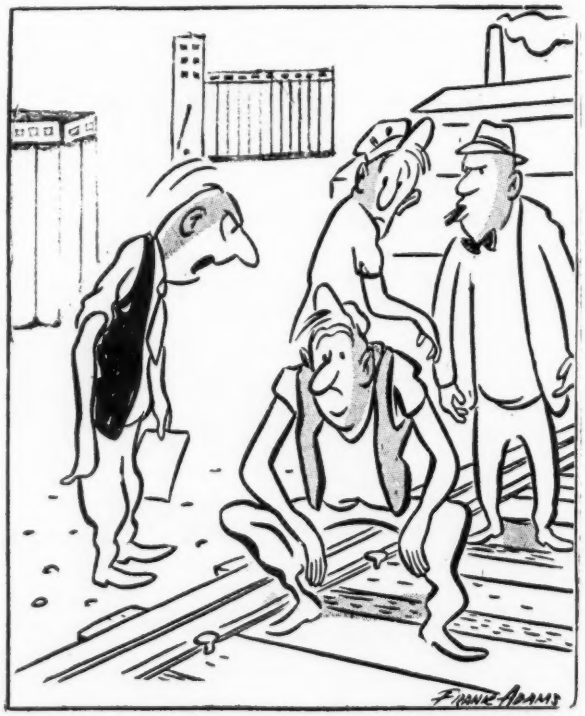
While the consumer group on a few occasions wielded important influence in carrying the soybean price risk, the producer group has adopted a far more dominant role in this field.

This year, in spite of a 74-million-bushel increase in the soybean crop, fewer soybeans were marketed in the first three months of the crop year than in the same period last year from a much smaller crop. Therefore, the producer this year is carrying the bulk of the price risk involved in this record crop.

Consumers of soybean products obviously have opinions contrary to those of the producer.

Surely no one can be critical of the producers' activity in carrying the price risk or speculation. Producers, as a group, are currently carrying the overwhelming bulk of the price risk.

While the public, or professional speculator, is credited with much activity in the soybean market, the net ownership of this group is quite small in relation to producer ownership.



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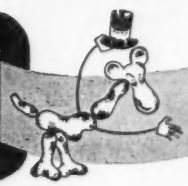

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Oil Mill Conference

Abstracts of papers presented at the joint annual conference of oil mill officials at Lubbock, Tex., Mar. 7-9.

Utilization of Fats and Oils in Industrial Products

By LYLE E. GAST and HOWARD M. TEETER

Northern Utilization Research Branch, Peoria, Ill.

CONTINUED high production of edible and inedible fats, cottonseed, and soybeans, and loss of markets to competitive products have resulted in a surplus of fats and oils that appears to be a continuing one. An intensive research effort to discover new derivatives for industrial utilization offers the best possibility of solving the problem of surplus fats.

Analysis of several important fields of use for fats, oils, and their derivatives in industrial products shows that chemical modification of fats and oils has resulted in significant new developments. However, the total research effort has not been sufficient to prevent inroads by competitive products and to keep up with increasing production. Many opportunities appear to exist for increased utilization of fats and oils in industrial products, but it will be necessary to prepare and evaluate a wide variety of new derivatives of fats and oils to determine those derivatives having the greatest potentialities for industrial use.

In the field of resinous products and protective coatings, the development of polyamide resins is an important example of the results of research. These resins, obtained from dimerized fatty acids and diamines, have found increasingly wide application as heat-sealing and moisture proofing agents, adhesives, and lacquers. Recently it has been found that epoxy resins can be combined with polyamide resins to give resinous products having unusual properties. Polyamide resins are also finding increasing use in gelled paints. Epoxy resins can also be cured with fatty acids and other non-fatty products. Alkyd resins consume large quantities of fatty acids and non-fatty derivatives for modification.

Fats and oils have recently become more prominent in plasticizers as a result of development of epoxidized oils and of "internal plasticizers" like vinyl stearate. Synthetic lubricants for aircraft require increasingly large amounts of dibasic acids, some of which are derived from domestic fats and oils. A tremendous potential market exists for inexpensive synthetic automotive lubricants for use in cold climates, but it does not appear that fatty acid derivatives have yet been explored extensively for this purpose.

Over the past 10 years, synthetic detergents have made extensive inroads into markets formerly supplied by soap. The development of detergents based on sulfated fatty alcohols has helped to regain some of these lost markets.

In all major fields of use for fats and oils, the contribution of research in providing new products and in increasing utilization is evident. There is no reason to believe that all useful applications for fats and oils have been found. New dibasic acids, polyfunctional molecules, polymers, and resinous materials can be obtained readily from fats and oils. These should find use as modifiers for alkyd resins, epoxy resins, and other resinous compositions, as bases for synthetic lubricants and detergents, and as raw materials or intermediates for plastics and coating compositions.

Relation of Refining Treatment to Color and Stability of Soy Oil

By R. E. BEAL

Northern Utilization Research Branch, Engineering and Development Section, Peoria, Ill.

THE CONVERSION of crude soybean oil to a product suitable for use as shortening, margarine, or a salad oil is accomplished by the successive steps of refining, bleaching, hydrogenation, in the case of shortening or margarine, and deodorization. With the exception of hydrogenation, the object of these treat-

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"I just finished combining 150 acres of soybeans. I had really tough conditions. In some places there were button weeds over six feet high and as thick as fork handles!

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ments ... the removal of undesirable impurities from the oil.

The proper refining treatment removes substantial amounts of free fatty acids, phosphatides, color bodies and other materials from the crude oil so that a finished oil with light color, good flavor and flavor stability may be obtained. From the standpoint of the amount of impurities removed, refining may be considered the most important of the processing steps.

Crude soybean oil may be refined by intimately mixing it in controlled proportions with an aqueous solution of caustic soda followed by controlled heating, to coalesce the impurities, and centrifugal removal of these substances from the refined oil. In order to reduce refining losses to a minimum it is now preferred to conduct the refining in two stages.

In the first stage the oil is treated with an aqueous solution of either caustic soda, soda ash, or ammonia in an amount sufficient to neutralize the free fatty acid in the oil. After removing the soap stock from this treatment by centrifugal separation, the oil is treated in the second stage with a sufficent amount of an aqueous solution of caustic soda to reduce the color and phosphatide content of the oil to a desired level.

The technology of refining is largely concerned with the selection of the proper strength and amount of caustic soda solution to achieve a desirable degree of purification with a minimum loss of neutral oil. Experiments conducted on a pilot-plant scale indicate that the phosphorous content of an oil is a very satisfactory criterion for determining the optimum amount of caustic to use for refining crude soybean oil. The phosphorous content of the deodorized oil was found to be between 1.5 and 10 parts per million for best stability and color.

Dilute caustic was found to be more effective for removing iron and phosphorus from a crude soybean oil and it also left more of the antioxidant, tocopherol, in the refined oil. A 0.05-percent excess of caustic soda in 8° Baume' solution was found to reduce the iron and phosphorous content of a crude oil to the same extent as a 0.3-percent excess of caustic soda in 20° Baume' solution. Both over-refining and the use of strong caustic are detrimental to oil quality.

Countercurrent Fractionation of Vegetable Oils

By LYLE E. GAST and HERBERT J. DUTTON

Northern Utilization Research Branch, Peoria, Ill.

VEGETABLE oils like petroleum oils are not a single compound but are composed of a mixture of components. There is no reason to believe that the components placed in soybean oil by mother nature for the benefit of the soybean are necessarily the best combination for a paint oil or an edible oil. The trend in the vegetable oil industry like the trend in the petroleum industry is to make tailor-made products for specific uses out of the mixture mother nature has provided us.

The distillation processes so widely used by the petroleum industry for the fractionation of crude oils is generally not applicable to vegetable oils because of their low volatility. Certain adsorption processes have been used in the laboratory for separation of fatty compounds but they are unlikely to succeed commercially because of the large quantities of adsorbents and solvents required to separate a small amount of oil. Crystallization is a common technique for fractionating fats, and it is used on a commercial scale by vegetable oil and fatty acid manufacturers. It suffers, however, from the defect of being applicable only in special cases and is inevitably a slow batch process.

The fractionation of fats of liquid-liquid extraction or by virtue of their differential solubility is a comparatively recent development which has already been applied on a commercial basis. The laboratory counterpart of commercial liquid-liquid processes has given separation of fatty compounds heretofore unobtainable by the chemist. Although commercial installations have not attained the separatory power of laboratory equipment, they have nonetheless performed useful and practical separations.

Under a favorable price situation, soybean oil is fractionated to yield a paint oil and an edible oil. This process has been carried out for a period of years with a capacity of one tank car per day.

Another liquid-liquid extraction process is used commercially for the decolorization and refining of animal tallows. Both the fractionation of fats and the decolorization of tallow are conducted in gravity columns. It is possible that these gravity columns will be replaced in the future by centrifugal contactors that, despite their small size, have resolving power greater than that of gravity columns and a capacity up to 25,000 gallons an hour.

Liquid-liquid extraction processes and the resultant tailor-made fats appear to be rising on the horizon in fat and oil technology.

Corn earworm infestations resulted in total damage of $693,000 to the soybean crop in 1954, according to the U. S. Department of Agriculture.

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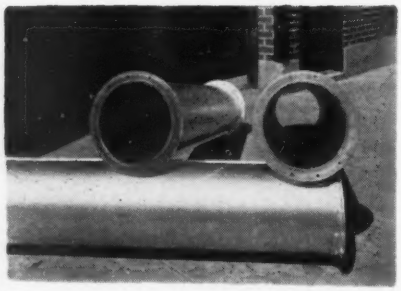

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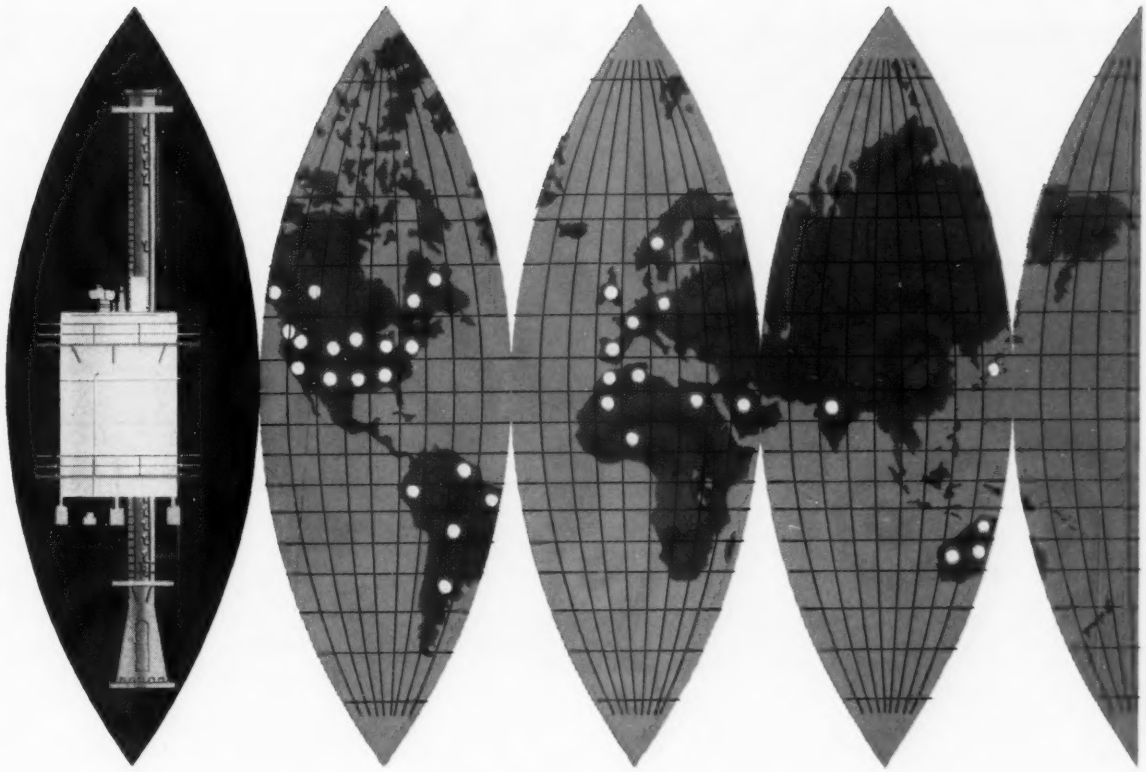

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Changes in U. S. Standards

CHANGES in the official standards under which 1955-crop soybeans will be traded were announced by the U. S. Department of Agriculture on Apr. 11. They will become effective Sept. 1.

Main change in the standards will lower the foreign material allowance in each grade by 1 percent. No. 2 grade on which soybeans have been customarily bought will allow only 2 percent foreign material instead of the 3 percent allowed by the present standards.

However, observers point out the change may make no difference in actual buying practices so far as foreign material content is concerned. Soybean processors have been buying soybeans on a basis of 2 percent foreign material the past two seasons in order to obtain better quality beans.

The U. S. Department of Agriculture decision followed hearings called at the request of the American Soybean Association. The Association put up a long battle to clean up marketing practices and change the grading standards to encourage the marketing of higher quality soybeans, and to eliminate the confusion due to trading on a combination of two grades since 1953. Soybean processors have used the No. 1 grade limit on foreign material, and No. 2 factors on such items as splits and test weight.

The Association contends that the present "loose standards" have resulted in the marketing of lower quality beans that have in the long run been costly to producers, says Geo. M. Strayer, executive vice president of the American Soybean Association. Buyer resistance to dirty beans has been built up, particularly in foreign markets, and our whole export market for soybeans has been jeopardized, Strayer says.

The Soybean Association will conduct a campaign in coming months to encourage producers to do a cleaner job of combining 1955-crop soybeans to take advantage of the changes in the grading standards, and to encourage the marketing of better quality soybeans.

The Department of Agriculture has announced there will be no changes made in moisture requirements in the standards. No. 2 grade will still allow 14 percent moisture. USDA also decided to take no action on its proposal to change the classification on green and yellow soybeans.

Other changes in the standards which will become effective Sept. 1 will include fixing special limits on heat-damage in each grade; redefining splits as pieces of soybeans that are not damaged; and restricting the grade of purple mottled or stained soybeans to not higher than No. 3.

The Soybean Digest has recommended that soybean processors pay premiums on low-moisture-content soybeans to correspond to discounts taken for high moisture content, effective with the 1955 crop.

Oilseed Conference

Conference of the International Association of Oilseed Crushers will be held at Baden-Baden, Germany, June 7-10, President Guy W. Chipperfield, London, has announced.

Representatives from the United States will include: Duane Andreas, Honeymead Products Co., Mankato, Minn., who will represent U. S. oilseed crushers; and J. W. J. Stedman, Foreign Agricultural Service, U. S. Department of Agriculture, Washington 25, D. C.

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NATIONAL FATS AND OILS BROKERS' ASSOCIATION

George K. Dahlin—President

Name Smalley Check Sample Award Winners

TIED for first place in the soybean series in the Smalley check sample work carried on by the American Oil Chemists' Society were W. N. Kesler, Woodson-Tenent Laboratories, Memphis, Tenn.; and O. E. Wilkins, Memphis Testing Laboratory, Memphis, Tenn.

Awards were made at the 46th annual meeting of the society at New Orleans Apr. 20. Named for the late Frank N. Smalley, purpose of the awards has been to enhance the accuracy and dependability of chemical analysis.

First place in the oil and nitrogen testing in the oilseed meal series went to E. R. Hahn, Hahn Laboratories, Columbia, S. C.

Second place in the oilseed meal series was won by H. L. Hutton, Woodson - Tenent Laboratories, Clarksdale, Miss.

These five tied for first place in oil: Mr. Hutton; Mr. Hahn; D. B. McIsaac, Kershaw Oil Mill, Kershaw, S. C.; H. L. Tamborini, California Cotton Oil Corp., Los Angeles, Calif.; and Biffle Owen, Planters Manufacturing Co., Clarksdale, Miss.

Tied for first place in the nitrogen testing were Mr. Hahn; C. E. Worthington, Barrow-Agee Laboratories, Cairo, Ill.; and J. R. Simpson, Woodson-Tenent Laboratories, Cairo, Ill.

Another tie, among four, resulted from the moisture analysis: A. G Thompson, Jr., Southern Cotton Oil Co., Columbia, S. C.; H. M. Bulbrook, Industrial Laboratories, Fort Worth, Tex.; Mr. Tamborini; and Mr. Owen.

In the vegetable oil series J. J. Ganucheau, Southern Cotton Oil Co., Gretna, La., won first place; and F. M. Tindall, HumKo Co., Memphis, Tenn., was second.

The following officers of the American Oil Chemists' Society were elected without opposition: W. A. Peterson, Colgate-Palmolive Co., Jersey City, N. J., president; T. H. Hopper, Southern Regional Research Laboratory, New Orleans, vice president; R. W. Bates, Armour & Co., Chicago, secretary; and A. F. Kapecki, Wurster & Sanger, Inc., Chicago, treasurer.

Open ADM Terminal

First barge of grain was loaded out of the new 2-million-bushel Archer-Daniels-Midland Co. grain terminal in St. Paul Apr. 19.

Construction of the combination rail, barge, and truck terminal was started last June. It brings ADM's grain storage capacity in the Twin City area to 24 million bushels.

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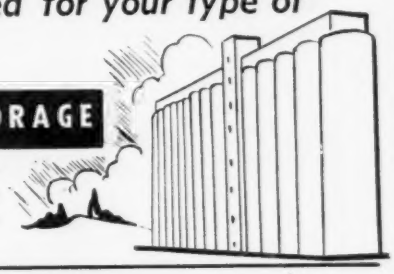

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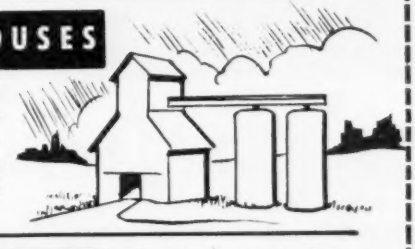

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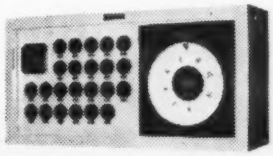

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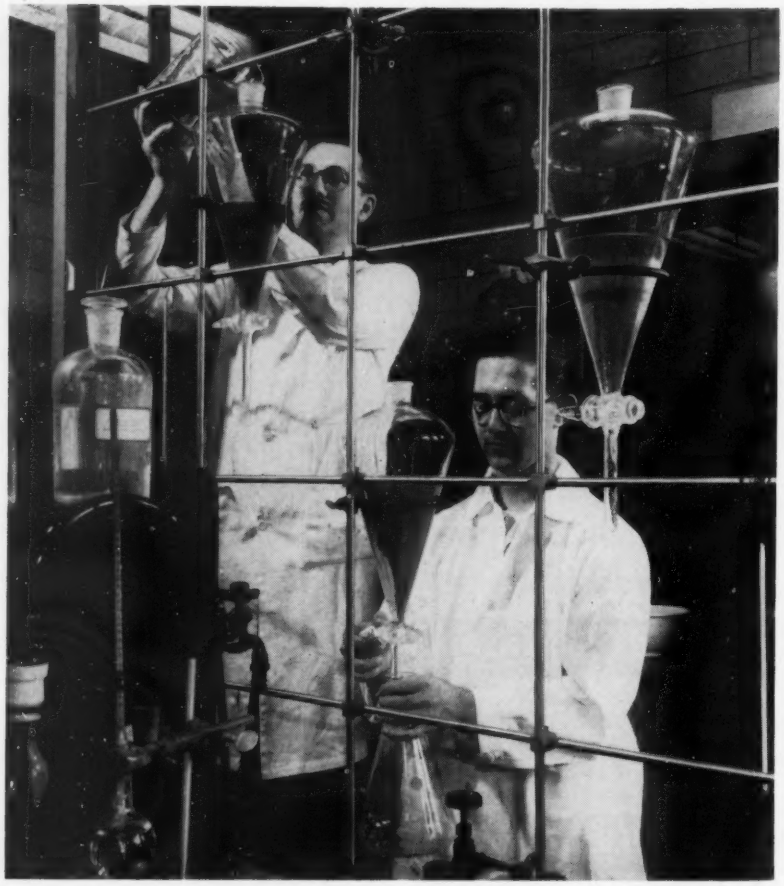

S. B. Radlove (left), and Paul Davis, research chemists at Glidden's chemurgy division laboratories in Chicago, are shown performing quality control tests on production samples of lecithin emulsion. Rigid tests are performed almost hourly to insure that each batch is of uniform particle size, taste, texture and quality.

GLIDDEN MAKES NO CLAIMS—BUT

RG Lecithin Gains Popularity

A NATIONAL advertising and promotional campaign based on studied understatement has been launched to increase the distribution of RG Lecithin, a dietary food made by the Glidden Co., nationally known producer of food products under the popular Durkee Famous Foods label.

This heretofore little-publicized substance, a product of Glidden's chemurgy division in Chicago, has been used for years as an ingredient in the manufacture of bread, shortening, candy, ice cream and scores of other manufactured food products, rendering them more palatable and digestible.

Purpose of the campaign is to increase distribution of RG Lecithin to meet the swelling demand for it created to date solely by enthusiastic word-of-mouth reports from users.

Lecithin (pronounced less-i-thin) gets its somewhat mysterious name from the Greek word lekithos, meaning egg-yolk, one of the early sources of lecithin. More recently, however, the soybean has proved to be by far the richest source of this substance and it is now being extracted in large commercial quantities from this versatile farm product.

What soybean lecithin has accomplished in food products has stimulated scientists to explore the possibilities of introducing it into the human diet in a highly purified form. Research and experiments have been conducted by Glidden scientists in Chicago and at a number of leading universities.

To date, this research suggests that lecithin may act as an emulsifying agent in the blood system, just as it does when used as an additive in food products. Specifically, soya lecithin has been found at these research centers to disperse or break up large deposits of fatty materials and cholesterol, a solid alcohol found in many natural foodstuffs and synthesized by the body.

The fatty materials and cholesterol, when accumulated in abnormally large amounts in the body, are said to be the major causes of hardening of the arteries. This condition frequently leads to paralytic strokes, chronic heart ailments and death.

Makes No Claims

The Glidden Co., however, which is the nation's only producer of a pharmaceutical grade of lecithin, will make no claims about its uses until these are clinically established.

But there has been a sharp increase in its use as a dietary food. Rapidly growing numbers of daily

users of RG Lecithin and their self-inspired enthusiasm for its value have made it necessary for Glidden's chemurgy division to double its RG Lecithin production several times during the last few years. This demand reached a peak in 1954.

Lecithin is what is known to science as a phosphatide, or phosphorous-containing lipide. The latter, derived from the Greek lipos, means fat and refers to the fats and oils of animals and vegetable origin. Lecithin has been found in brain and nerve tissue, blood corpuscles and in the yolks of eggs. Recent clinical research has indicated that the phosphatides may be present in the tissue of all living things.

First Attention

Soybean lecithin first attracted attention some years ago when it was discovered the substance would promote smooth blending and prevent rancidity when used as an adjunct in the manufacture of various food products. Used in this manner, lecithin acts mainly as an emulsifier; it breaks up fat particles and oil globules and spreads them evenly throughout a food product to produce the desired results.

Used in making margarine, for example, lecithin prevents the accumulation or "bunching" of fat globules in the product and overcomes the tendency of milk ingredients to cause spattering when margarine is heated. It produces the same effects when used in making chocolate, ice cream, baked goods, shortening and a host of other food products.

As a result of the increasingly encouraging experiments on Glidden's RG Lecithin, the highly refined granulated grade, the company recently launched a campaign designed to make everyone aware that the product is available. Similarly, the entire American medical profession has been informed of the past history of lecithin and its potential for the future.

Prohibit Oil Exports

The export of various commodities from Yugoslavia, including certain fats, oils, and oilseeds, is prohibited, according to a decision of the Federal Executive Council's Committee for Economy, reports the American Embassy, Belgrade, according to USDA's Foreign Crops and Markets.

The ruling, which took effect Feb. 23, widens the embargo and quota lists established early in 1954. Among the products prohibited from exportation are soybeans, oilseed cakes, cottonseed, butter and lard.

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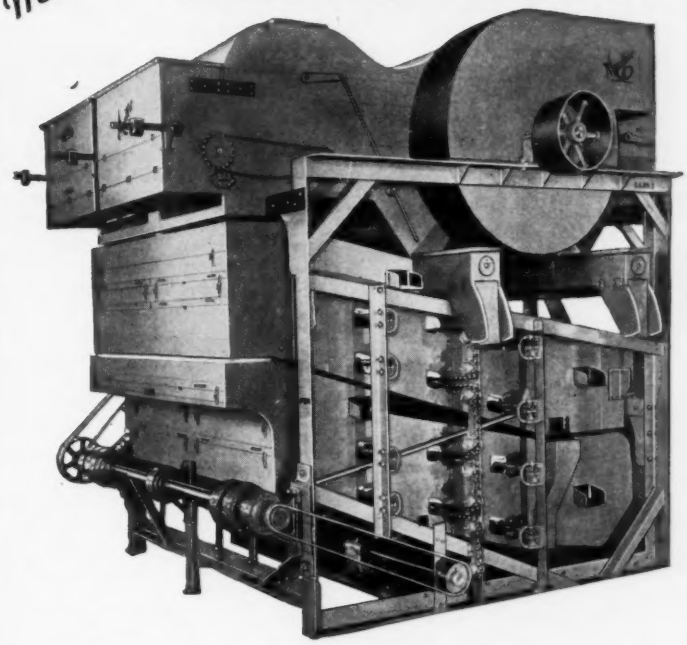

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PUBLICATIONS

See Some Use for Weedicides on Beans

CHEMICALS ON WEEDS. Conclusions on the use of chemicals for weed control in soybeans based on experiments conducted in North Carolina in 1953 and 1954:

1—Certain urea herbicides were excessively toxic to soybeans.

2—The optimum rates of DN, CIPC, and PCP were approximately eight, eight and eighteen pounds per acre, respectively. These rates are sufficiently low to prevent major yield reductions but are not high enough to give consistent outstanding weed control.

3—Further experimental work appears warranted with the experimental materials M-6 and M-7 (Monsanto Chemical Co.). NPA, NPA+ NPL and Endothal were not found to be of value for controlling weeds in soybeans.

4—The effectiveness of herbicidal oils in experimental plots has been demonstrated. Further research is needed to ascertain the benefit to be derived from using this practice in the production of soybeans.

FIELD EXPERIMENTS CONDUCTED IN NORTH CAROLINA DURING 1953 AND 1954 RELATING TO WEED CONTROL IN SOYBEANS. By Robert P. Upchurch, North Carolina Agricultural Experiment Station. Proceedings Eighth Annual Meeting of the Southern Weed Conference, St. Petersburg, Fla. Price $3. E. G. Rodgers, secretary, Floyd Hall, University of Florida, Gainesville, Fla.

FLORIDA. Two experiments were conducted with a number of different herbicides on soybeans at Gainesville, Fla., in 1954.

In the first experiment the soybeans were planted June 5, herbicides were applied June 8, and soybeans emerged June 9. In the second experiment soybeans were planted July 26, herbicides were applied July 28, and soybeans emerged July 30.

In the first experiment none of the treatments gave satisfactory weed control without considerable reduction in stand of soybeans. A stand of volunteer peanuts that emerged with the soybeans was not visibly injured by any treatment.

In the second experiment Chloro-IPC at all rates (three, six and nine pounds of active ingredient per acre), SES at the two- and four-pound rates, and SPCP at the 15-pound rate gave very good to excellent control of weeds with no reduction in stand of soybeans. Post-emergence treatments of DNOSBP at rates of 0.75 and 1.5 pounds per acre gave excellent control of broadleaf weeds, no control of crabgrass, and 20 to 25 percent reduction in stand of soybeans.

CHEMICAL WEED CONTROL IN SOYBEANS. By E. O. Burt and A. G. Witherspoon, Florida Agricultural Experiment Station. Proceedings of Eighth Annual Meeting of the Southern Weed Conference. Price $3. E. G. Rodgers, secretary, Floyd Hall, University of Florida, Gainesville, Fla.

WEED CONTROL. Chemical weed control in soybeans is progressing, but not so rapidly as in crops that belong to the grass family, according to F. W. Slife of the University of Illinois.

Because of the variability of results this type of treatment has not been recommended.

Abstracts were submitted on the effect of a variety of pre-emergence chemicals on soybeans at the recent North Central weed control conference at Fargo, N. Dak.

DNBP and CIPC gave good control of weeds but produced injury at the higher rates of application. The 2,4-D type of materials, although giving good control, injured soybeans severely in most cases. Alanap continued to give good results in Ohio.

Abstracts were also submitted on post-emergence treatment on soybeans. They indicate that light rates of 2,4-D or herbicidal oils may have a place in controlling weeds in soybeans. One reported that soybeans planted in the spring were not affected by several formulations of 2,4-D applied to the soil at 40 pounds per acre in the previous fall to control perennial weeds. The other indicates that stands could be reduced materially by chemicals before any yield reductions would be noticeable.

RESEARCH REPORT ELEVENTH ANNUAL NORTH CENTRAL WEED CONTROL CONFERENCE 1954. Price $2. Fred W. Slife, secretary-treasurer, North Central Weed Control Conference, department of agronomy, University of Illinois, Urbana, Ill.

WEEDS. D. W. Staniforth and C. R. Weber at Iowa State College have compared the yields of row-planted soybeans in which weeds were controlled by conventional cultivation operations and the surviving weeds allowed to grow to maturity with the yields of soybeans which were cultivated and hand weeded, and maintained in a weed-free condition throughout the growing season.

Yield reductions from weed infestations composed largely of foxtail ranged from two to five bushels per acre, or 10 to 15 percent. Yield reductions from pigweed were generally somewhat greater and approached 25 percent in one test.

RESEARCH REPORT ELEVENTH

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ANNUAL NORTH CENTRAL WEED CONTROL CONFERENCE 1954. Price $2. Fred W. Slife, secretary-treasurer, North Central Weed Control Conference, department of agronomy, University of Illinois, Urbana, Ill.

VIRGINIA. Fourteen chemicals applied to soybeans in 1953 all reduced the number of weeds significantly when compared to untreated plots in Virginia experiments. At one location three of these, PCP, CIPC and Alanap-3, resulted in significantly fewer weeds than other chemicals used.

A 1954 experiment in which soybeans were sprayed with PCP at 18 pounds per acre and subsequently given eight levels of cultivation showed increased yield at all cultivation levels. Two or three cultivations were no better than one cultivation.

Another experiment in 1954 showed no advantage from cultipacking or floating the soil prior to spraying.

WEED CONTROL IN SOYBEANS. W. E. Chappell and H. M. Camper, Jr., Virginia Agricultural Experiment Station. Proceedings of Eighth Annual Meeting of the Southern Weed Conference. Price $3. E. G. Rodgers, secretary, Floyd Hall, University of Florida, Gainesville, Fla.

TEXAS. Yields of soybeans in Texas experimental plantings have not been large enough nor consistent enough in any area for the crop to be generally grown, report workers at the Texas Agricultural Experiment Station.

Yields in the Red River area of northeast Texas often approach the level at which their production would be profitable but they are very erratic from season to season.

Under irrigation on the High Plains and in the El Paso Valley, yields large enough to be profitable are common, but the income from soybeans does not approach that from cotton or grain sorghum.

The new shatter-proof variety, Lee, will soon be available for commercial production, but this variety also is subject to the same climatic hazards as the older varieties and its performance has been equally erratic from year to year.

Texas farmers interested in soybean production should limit their acreage to trial plantings and should not place confidence in the results from a single year, say the Experiment Station men. If trial plantings are to be made in north Texas, beans of better quality may be made from June plantings than from early spring plantings.

Good vegetative growth of soybeans usually is obtained in Texas and they are being used in some areas as a hay crop. The late maturing varieties, Improved Pelican, Red Tanner, Ototan and Roanoke, will produce more forage than earlier-maturing varieties.

SOYBEAN RESEARCH IN TEXAS. By E. C. Bashaw, J. R. Quinby, D. I. Dudley and John Box. Progress Report 1755, Texas Agricultural Experiment Station, College Station, Tex.

CANADA. Delay in planting date of soybeans beyond May 19 reduced the yield and also the oil content rapidly in three-year tests with the Capital variety and two-year tests with Mandarin at the Central Experimental Farm at Ottawa.

For each delay in planting there was a corresponding reduction in the yield and the oil content of the beans. Delaying the planting time from May 19 to June 16, a difference of four weeks, reduced the yield of both varieties approximately 50 percent and the oil content of Capital 2.6 percent, and Mandarin 1.4 percent.

The effects of delayed planting may be expected to be more severe in years when seasonal conditions are cooler than average.

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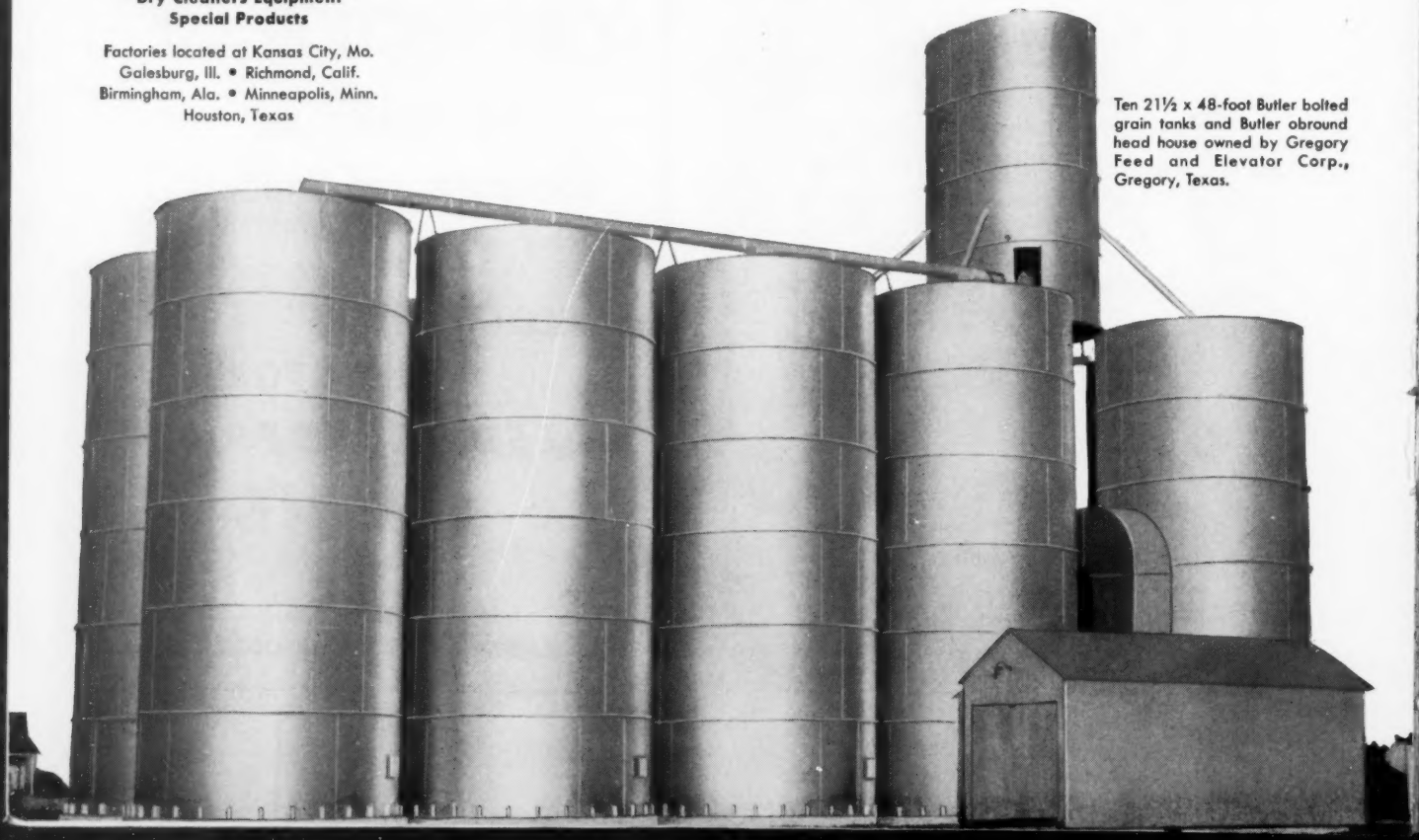
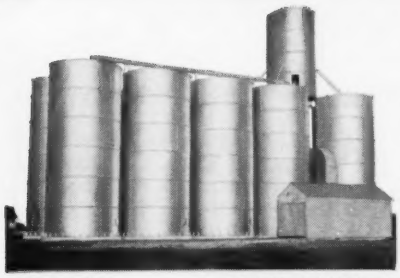


Ten 21½ x 48-foot Butler bolted grain tanks and Butler obround head house owned by Gregory Feed and Elevator Corp., Gregory, Texas.



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J. H. Wise & Son, 222 Broadway, Boise
Louis A. Thorson, 277 Pierce Street, Twin Falls
ILLINOIS
Western Tank & Bldg. Corp., 217 Standard Bldg., Decatur
INDIANA
Shinkle Construction Co., 2406 Main, Elwood
IOWA
Todd Construction Co., Ames
Mill & Elevator Serv. Co., Box 141 Highland Park Station, Des Moines
E. W. Epperson & Co., Sumner
KANSAS
Ernest Engineering Co., 601 N. Van Buren, Topeka
MINNESOTA
Chipera Construction Co., Doran
Hoganson Const. Co., 622 Flour Exchange Bldg., Minneapolis
T. E. Ibberson Const. Co., 400 Flour Exchange Bldg., Minneapolis
MISSOURI
Kansas City Millwright Co., Board of Trade Bldg., Kansas City
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Burt Talcott, Builder, 2600 Ninth Ave., N., Great Falls
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TEXAS
E. O. Ross, Inc., 1903 N. Lexington Blvd., Corpus Christi
Briggs Weaver Machinery Co., 5000 Hines Blvd., Dallas
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BUTLER MANUFACTURING COMPANY

oil-content varieties may be completely nullified by delayed planting in the Ottawa area.

Results of a rate-of-planting test were inconclusive after two years. Planting was in 7-, 14-, 21-, 28-, and 35-inch row widths and at three different rates of thinning.

Under the ideal conditions of 1952, the closer spacings yielded the highest. But the unfavorable conditions of 1953 resulted in the wider spacings producing the highest yields.

In 1952 lodging was severe in the three narrower rows. In 1953 no lodging occurred.

Varieties recommended for the Ottawa district and areas with similar climatic conditions are Acme, Comet, Flambeau, Capital and Mandarin.

SOYBEAN INVESTIGATIONS. By F. Dimmock. Progress Report—1949-1953. Central Experimental Farm, Ottawa, Ontario.

SOUTH DAKOTA. Acreage planted to soybeans in 1955 is expected to increase more percentagewise in South Dakota than in any other state, according to the Mar. 1 planting intentions report of the U. S. Department of Agriculture.

A total of 279,000 acres is predicted, an increase of almost 100,000 acres.

South Dakota yield and production by counties are reported by the crop reporting service of that state. Total yield in 1954 was 3.1 million bushels compared with 1.6 million bushels in 1953.

SOUTH DAKOTA AGRICULTURE 1954. Crop and Livestock Reporting Service, 219 West 8th St., Sioux Falls, S. Dak.

MARKETS. The commodity futures markets have attained a trading volume and degree of stability in the past five years that compares favorably with the prewar period 1935-39, the U. S. Department of Agriculture reported, on the basis of a special study by the Commodity Exchange Authority.

Issued as a survey of futures-market conditions in the period since World War II, the study is a 44-page publication entitled Futures Trading under the Commodity Exchange Act, 1946-54, by J. M. Mehl, who retired recently as CEA administrator.

"In the older futures-trading commodities, particularly grains and cotton, futures prices are now about as widely used as before the war in determining cash or spot prices," the report states.

"The services of the futures markets in a number of other commodities, including fats and oils, soybeans, wool, and wool tops, have increased considerably in the postwar period.

"The relative stability of the markets and their adequacy for hedging against price risks is reflected in the average levels of open contracts over the past several years. For most commodities the levels exceed the averages for the prewar period.

"To the extent that the services of price basing and risk bearing have increased in commodities which now have broader futures markets, a net gain in agricultural marketing economy may be credited."

FUTURES TRADING UNDER THE COMMODITY EXCHANGE ACT, 1946-54, Commodity Exchange Authority, U. S. Department of Agriculture, Washington 25, D. C.

MISCELLANEOUS

LIST OF AVAILABLE PUBLICATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE. Compiled by Eleanor W. Clay. List No. 11 issued 1954. Price 45 cents. Superintendent of Documents. U. S. Government Printing Office, Washington 25, D. C.

FERTILIZER USE AND CROP YIELDS IN THE UNITED STATES. Agriculture Handbook No. 68. U. S. Department of Agriculture. 50 cents. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C.

LETTERS

For Moisture Premiums

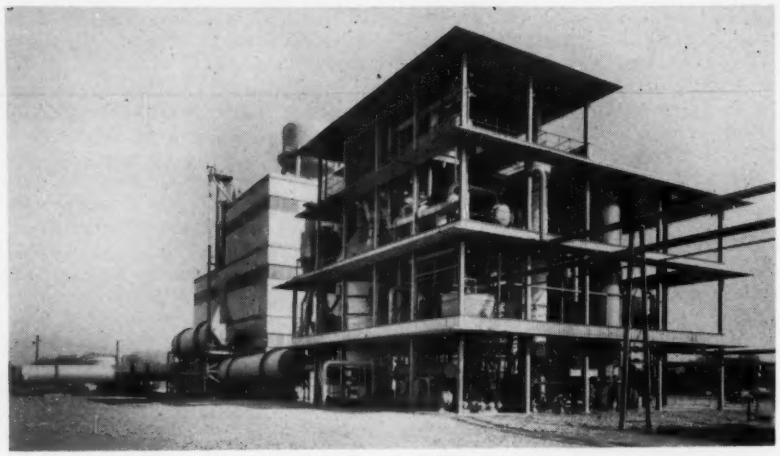
TO THE EDITOR:

I like your editorial on "premiums as well as discounts" and hope all growers read it and talk it. This is something I've contended for years would be the only fair way to buy low moisture corn and the same holds true with beans.

I think if we talk long enough, loud enough and often enough the trade too will become aware of the fact that this is the only fair way to buy either grain.

There is nothing to insure a low-moisture-content bean more than a few cents premium which certainly would be good for the trade in general. The way it stands now the fellow who brings in the 9-, 10- and 11-percent-moisture bean is really taking quite a penalty.

I think you are doing a fine service with the Soybean Digest. I wouldn't want to be without it.—*Eldred Buer, Eldred Buer & Sons, Canby, Minn.*



PROCESSING FACILITIES at Central Soya's new Southeastern plant at Chattanooga, Tenn.

Opens Plant at Chattanooga

CENTRAL SOYA'S newest soybean processing and feed manufacturing plant at Chattanooga, Tenn., has begun operations.

Under construction since December 1954, the two buildings making up the solvent extraction plant incorporate new and radical design both in equipment and plant construction.

The three-story milling building houses whole bean surge tanks, automatic hopper scales and the conditioning, cracking, flaking and aspiration equipment used in preparing the beans for solvent extraction. The building is of steel and concrete slab construction with an exterior of alternating bands of vertical aluminum siding and colored, translucent corrugated plastic running completely around the building on each level of the structure.

Soybeans are received in the milling building by an automatically controlled conveyor through an underground connecting basement from the storage silos. After preparation, the soybean flakes travel by means of an inclined conveyor to the four-level solvent extraction building.

The heart of the solvent extraction building is the Blaw-Knox Rotocel extractor, whose 850-ton-per-day capacity makes it the largest ever fabricated at the time of installation. This 26-foot-diameter giant puts soybean flakes through seven stages of percolation using hexane as the solvent for oil extraction.

After extraction, the spent flakes are elevated to a desolventizer-toaster unit which removes the remaining solvent, heat treats the meal with steam, and develops the flake's protein for high nutritional value. The flakes are then ground, dried and classified over shaker screens before passing through two meal cooling drums located outside the building. From these drums the meal is ready for use in the manufacture of feed.

The soybean oil and solvent mixture go through three stages of temperature and vacuum treatment. The solvent vapors removed at each step of separation go through three stages of condensation for maximum recovery of solvent. The oil, after complete solvent removal, passes through a series of filters before going on to storage tanks located outside the building.

The brain of the solvent extraction building is the master graphic control panel located in a pressurized control room. This panel permits automatic or manual control of every piece of equipment located in the extraction building. The control room, pressurized with fresh air to prevent infiltration of solvent vapor, is the only closed portion of the building. The rest of the structure is completely exposed for maximum operation safety and construction economy. The overhanging floor on each level of the structure provides protection from the elements for the operators.

The plant is equipped with inert gas purging equipment for use during startups and shutdowns, and a complete intra-plant communication system for operator coordination.

Aug. 15-19 are the dates set for the annual meetings of the American Society of Agronomy and the Soil Science Society of America, according to an announcement from L. G. Monthey, executive secretary of the two groups. Meetings will be held at Davis, Calif.

Close Mobile Firm

ALABAMA State Agriculture Commissioner A. W. Todd has taken over operation of the Alabama Grain Elevator Co., Mobile, Ala., according to the Associated Press.

The state official revoked the public warehouse permit issued to Alabama Grain Elevator Co. and took charge of the company for "the purpose of operating and liquidating same."

Landon V. Butler, Memphis, Tenn., speculator, is president of the company.

Butler has been suspended from membership on the Chicago Board of Trade and is the defendant in several lawsuits charging him with selling non-existent soybeans.

Liebenow reported that directors of the Chicago commodity market voted to expel Butler under rules of the exchange when he was found guilty "of fraud, dishonorable and dishonest conduct, and conduct inconsistent with the just and equitable principles of trade."

Butler was charged with selling warehouse receipts in a soybean transaction which were not backed by actual possession of the soybeans. The receipts were issued by a grain elevator company of which Butler was president, located in the state of Alabama, Liebenow said.

Butler previously had been suspended by the exchange under rules covering insolvency.

Less Margarine

MARGARINE production for February reached 119,803,000 pounds, S. F. Riepma, president of the National Association of Margarine Manufacturers, reported. This brings production for the first two months of 1955 to 244,279,000 pounds, a slight decrease from the comparable period of 1954.

February margarine production ran approximately 5 million pounds below the same month last year.

February creamery butter production totaled 101,750,000 pounds, bringing the total so far this year to 208,999,000 pounds.

Government forecasts are for average per capita margarine and butter consumption this year of 8.3 and 9.0 pounds, respectively. These are the same levels as reported for 1954.

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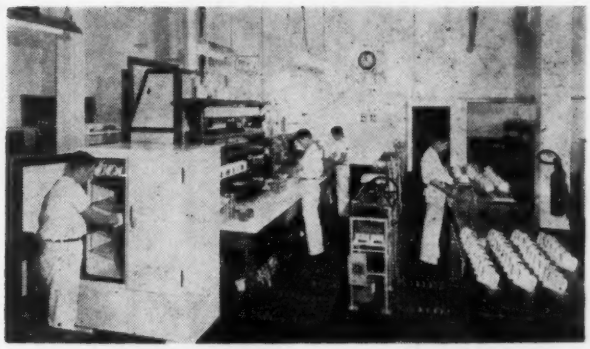

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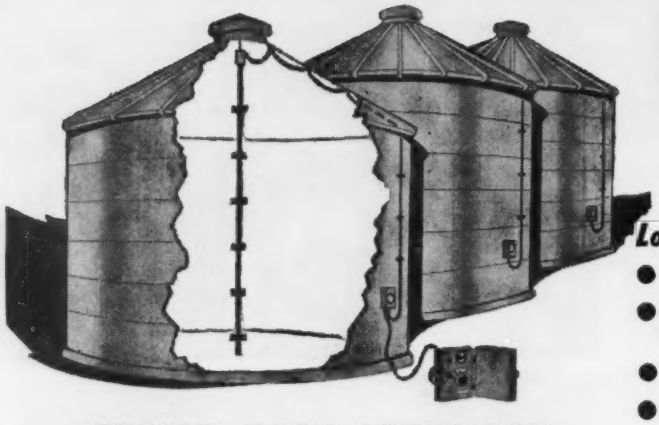

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Temperatures are key to safe, profitable storage of soybeans. By knowing temperatures, you know condition of beans at all times. By preserving the natural high quality of your beans, you can cater to the premium market . . . seed beans or premium oil beans. Sappy weed pockets, molds, moisture no longer worries in bean storage equipped with Hot Spot Detector.

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A-C's Roberts Dies

W. A. Roberts

R. S. Stevenson

W. A. Roberts, president of **Allis-Chalmers Manufacturing Co.** since February 1951, died suddenly Apr. 12 following a heart attack. He was 57 years old.

Mr. Roberts began his career with Allis-Chalmers in 1924 as a salesman for the firm's tractor branch in Wichita, Kans.

In March 1944 Mr. Roberts became vice president in charge of the company's tractor division. In March 1948 he became a member of the board's executive committee.

Under Mr. Roberts' direction, Allis-Chalmers has about concluded an expansion program totaling more than $100 million.

Robert S. Stevenson has been elected president of Allis-Chalmers Manufacturing Co., by the board of directors to succeed Mr. Roberts. Stevenson has been executive vice president of the company since July 1952.

He started with Allis-Chalmers in 1933 as a salesman in the tractor division at the Kansas City, Mo., branch.

He was appointed assistant general sales manager for the tractor division in 1948, and general sales manager in 1950.

He was appointed vice president in charge of the tractor division in February 1951. Later that year Stevenson was elected to the Allis-Chalmers board of directors.

Giloth Promoted

Karl F. Giloth has been appointed Midwest sales manager of **American Mineral Spirits Co.** according to an announcement by Max A. Williams, Chicago, vice president.

K. F. Giloth

Giloth will be Midwest sales manager for Amsco's petroleum solvents, technical naphthas and waxes. The Midwest territory extends from western Pennsylvania to the Rocky Mountains, and Giloth will maintain headquarters in Amsco's Chicago office.

With the exception of two years of service during the war, Mr. Giloth has been with Amsco since 1936, as an assistant in the traffic department, traffic manager, and in the sales department since 1946.

Farm Equipment Show

An unusually impressive demonstration of farm equipment was staged by **International Harvester Co.** in Chicago recently. Announced as the 1955 "Farm Equipment Progress and Development Review," the meeting drew a large attendance from agricultural magazines, newspapers, Chicago Farmers Club, Chicago Analysts Society, and other groups interested in farming.

Sixty-two tractor sizes were exhibited. The occasion marked the 3 millionth tractor produced by International Harvester.

John L. McCaffrey, president, spoke of 1955 as probably the most competitive year in the farm equipment field. He commented on the investment the company has made in the development of new products —their engineers worked for 40 years on the cotton picker; today, more than 60 percent of all cotton pickers are made by International. They began making farm tractors in 1906, and still regard the Farmall as the most important implement made.

New ADM Department

In a move aimed at further diversification of its activities, **Archer-Daniels-Midland Co.** has announced the formation of a new products development department. Dr. George K. Nelsen, formerly with the Celanese Corp. and the Shell Development Co., has been named director of the newly created department which is being expanded under Nelson's direction.

Geo. K. Nelson

At the present time ADM makes 850 products which range from livestock and poultry feeds to chemicals.

In his new position Dr. Nelson will evaluate the market potential for new products developed in ADM research laboratories and will be responsible for the introduction of new products. Nelson also will supervise the company's market research activities.

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New Package

A new Meadolake Margarine package has just been placed on the market. It was designed by Martin Ullman of New York and is a silver-foil covered carton with brown, yellow and white printing. The silver-foil helps deliver Meadolake flavor-fresh.

To introduce the new carton **Mrs. Tucker's Foods, Inc.,** which has manufactured Meadolake since 1938, has staged several spectacular promotions. Mrs. Tucker is well known for such advertising promotions having received last year the Food Field Reporter-Food Topics Award for the best local advertising of the year voted by wholesalers and retailers.

Curtin Advances

Dr. Leo V. Curtin has been appointed assistant director of feed research and nutrition by McMillen Feed Mills, division of **Central Soya Co.,** Fort Wayne, Ind. Dr. Curtin has been head, products research department of the Buckeye Cotton Oil Co. since January 1953, and will assume his new duties May 1 of this year.

Dr. Curtin recently has been engaged in research on the nutritive value of cottonseed meals for swine and poultry.

Dr. Curtin

Dr. Curtin will work with Dr. W. W. Cravens, director of feed research and nutrition, in the company's expanding research program.

"Crop with a Future: Soybeans" was the title of an article in the January issue of the New Orleans Port Record.

Francis E. Linnewah has been named manager of the control laboratories at **Dannen Mills,** St. Joseph, Mo. He has been connected with the laboratories of a number of feed processing firms in the Midwest.

Robert Syster, auditor for the Marion, Ohio, plant of **Central Soya Co.** and McMillen Feed Mills, has been promoted to manager of the company's plant at Harrisburg, Pa. He will replace William G. Haug, who is transferring to Indianapolis, Ind., with new duties in the company's commodity purchasing department.

The 26th annual convention of the **Grain Elevator and Processing Superintendents** will be held June 20-25 at the Royal Alexandria Hotel, Winnipeg, Manitoba, according to an announcement by Leslie C. Irwin, Searle Grain Co., Ltd., Fort William, president.

Robert C. Snyder, Kansas City, Mo., has been named advertising manager for **Dannen Mills,** St. Joseph, Mo. He has been production and advertising manager of the American Hereford Journal.

Paul C. Hughes, **Farmers Soybean Corp.,** Blytheville, Ark., has been elected president of the Arkansas Seed Dealers Association. First vice president is Joel Lambert, **Lambert Seed Co.,** Newport; and Joe Stallings, **Stallings Bros. Feed Mills,** Morrilton, is second vice president. Secretary-treasurer is Roy D. Hopkins, **R. D. Hopkins Feed & Seed,** Texarkana.

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Chicago 6, Ill.

Joseph Merck has been named manager of the **Central Soya and McMillen Feed Mills'** new feed warehouse, the Master Feed & Seed Co., Inc., at East St. Louis, Ill. He joined the company in 1952. The new warehouse will serve as a distribution center for Master Mix Feeds to dealers in southern Illinois, western Kentucky, northern Arkansas and eastern Missouri.

William F. Osborne has been transferred from Buffalo, N. Y., to Decatur, Ill., where he will work with Harold Bowen on the sale of **Spencer Kellogg & Sons** oilseed meals. Don R. Marsh has been appointed meal sales representative to succeed Mr. Osborne at Buffalo.

Continental Grain Co. officers held their annual management meeting in Chicago Mar. 26 and 27 to discuss anticipated effects of the St. Lawrence Seaway and other current conditions affecting their operations. Michel Fribourg of New York, company president, was in charge.

Homer W. Dice, 73, past president of the Indiana Corn Growers Association, died recently at Frankfort, Ind. He was a retired farmer and had been a salesman for the Soy Seed Co., Camden, Ind.

Shanzer Manufacturing Co., San Francisco, announces the retirement of Harold M. Shanzer from active participation in the management. McKinley Bissinger has been elected president, and Louis Sloss, Jr., vice president.

The transfer of Edmund F. Vesely to the vinyl plasticizer department of **Archer-Daniels-Midland Co.** has been announced. He will serve as a technical sales representative for eastern markets, and will headquarter at ADM's New York office.

All capital stock of Dixie Machinery Manufacturing Co., St. Louis, Mo., has been purchased by **Sprout, Waldron & Co.,** Muncy, Pa. The Dixie plant will continue to produce feed hammermills with eventual expansion to permit manufacture of some Sprout-Waldron products destined for Midwestern use.

Spencer Kellogg & Sons, Inc., announce the appointment of Edward R. Burley, Jr., as district sales manager in charge of the Cincinnati territory, succeeding the late Clayton J. Weydman.

The chemical products division of **Archer-Daniels-Midland Co.,** Cleveland, Ohio, has issued a new catalog dealing with its "Hydrofol" products. The publication contains information on fatty acids, fatty alcohols and other products.

Spencer Kellogg & Sons, Inc., announces the appointment of Ted A. Weiffenbach as district sales manager in charge of the Chicago territory.

C. H. Bell, president of **General Mills, Inc.,** has announced the sale of the General Mills Building in Minneapolis to Julius Epstein of Chicago. General Mills will continue to occupy the building for three years and will construct a new general office building at Wayzata Blvd. and County Road 18, west of Minneapolis.

Dannen Mills, St. Joseph, Mo., will open a Western district with headquarters in Denver, Colo. James Larson, Sterling, Colo., will be sales manager of the new district, which includes Colorado, Wyoming, the Panhandle district of Nebraska and southwestern South Dakota.

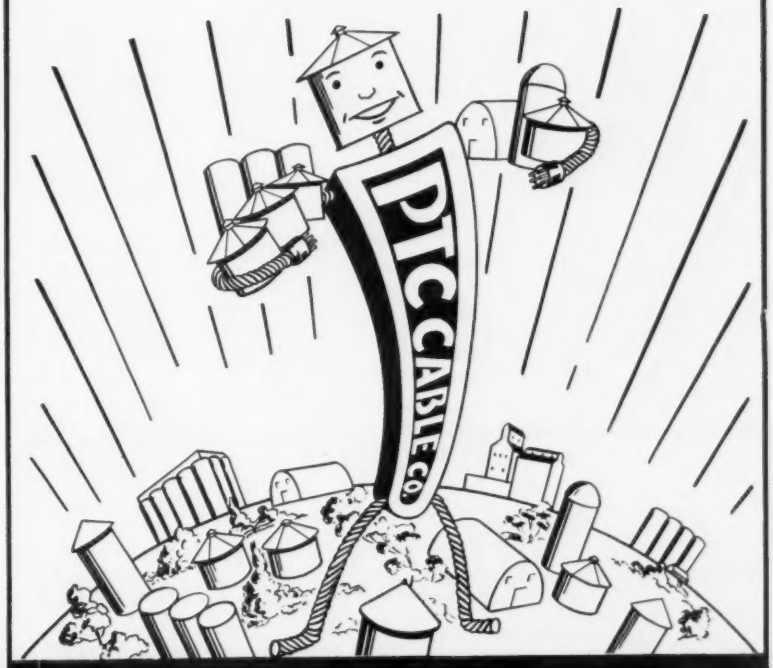
George and Howard Hebebrand and associates have formed the **Design Mfg. & Equipment Co., Inc.,** 1025-35 N. Sixth St., St. Louis 1, Mo. The organization has been incorporated under Missouri statutes and is now in operation.

Robert C. Mueller has been appointed sales manager for **Rayturn Corp.,** Portland, Ore., manufacturer of soil moisture measurement equipment. He will establish distributing sales and service outlets throughout the United States.

Across the Nation...

PTC TEMPERATURE INDICATING SYSTEMS STAND GUARD

against grain spoilage



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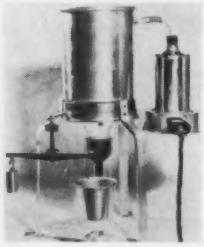
NEW PRODUCTS and SERVICES

MOISTURE TESTER. The Seedburo Equipment Co. has made arrangements to market a new moisture tester manufactured by Accurate Farm Moisture Testers, Inc.

This new moisture tester was originally designed as an inexpensive instrument for farm use. However, it has proved so accurate and so easy to operate that it was decided to offer it to the grain, feed and seed trades.



Average time for a moisture test is 15 minutes.

Of unusual interest is the fact that the new tester is capable of accurately testing the types of grain that cannot be accurately tested on electronic testers. Such types include grains containing snow or ice, freshly kiln dried corn, or mixtures of wet and dried grain.

The Accurate Moisture Tester operates under the distillate method. The Seedburo Co. believes this new process will obsolete other similar distillate methods of moisture testing. It is not designed to take the place of rapid electronic testers now used in terminal and country elevators but it could be used to good advantage as a standby unit.

The apparatus is calibrated for soybeans and most grains.

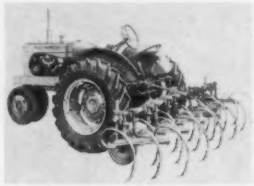
For further information write Soybean Digest 5b, Hudson, Iowa.

BULK STORAGE BINS. New bulletin describes the Day horizontal storage bin designed for buildings with limited head room. These bins provide a sanitary and efficient means of handling bulk materials.

Unskilled labor can install these bins quickly and easily.

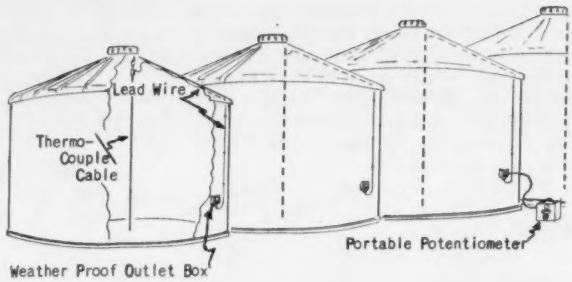
For further information write the Soybean Digest 5f, Hudson, Iowa.

CULTIVATOR. Allis-Chalmers has added the WD-45, 12-foot-wide rear-mounted, hydraulically controlled, heavy-duty field cultivator to its farm implement line. It is matched to the power of the company's WD-45 farm tractor.



The new field cultivator has 18 heavy duty, single ply spring teeth made of ½ by 1¾-inch heat-treated spring steel for durability and resistance to shock.

For further information write Soybean Digest 5e, Hudson, Iowa.



TEMPERATURE. A new temperature indicating unit for detecting conditions of stored grain on farms is now being manufactured by Hot Spot Detector, Inc.

The self-installed unit utilizes a flexible temperature cable which is suspended in the center of on-farm bins and provides temperature sensing points at every three-foot level. A small portable temperature indicator plugs into a reading outlet at the side of the bin for "scanning" the grain's condition from top to bottom of the bin.

The units are manufactured for all types, makes and sizes of farm grain storage bins and can be installed when full or empty.

Manufacturers say the Hot Spot Detector farm systems will detect and locate insect infestation, moisture pockets, molds and all heating disturbances in stored grain through temperature rises.

Diagram show simple installation and operation of the unit.

For further information write Soybean Digest 5h, Hudson, Iowa.

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The firm has been developing and manufacturing soil moisture equipment for a number of years.

The firm announces the purchase of Wood & Metal Products, Bloomfield Hills, Mich., which has been engaged in the manufacture of soil moisture measuring devices. It has also taken over all production and sales of the Bouyoucos soil moisture meters and irrigation equipment formerly manufactured by John Hewitt of Lansing, Mich.

For further information write Soybean Digest 5c, Hudson, Iowa.

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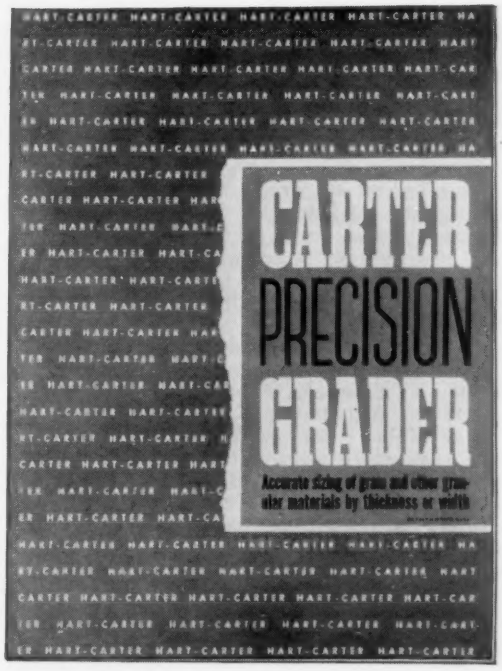

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WASHINGTON DIGEST

By PORTER M. HEDGE
Washington Correspondent for The Soybean Digest

OUTLOOK. The record supplies of soybeans dominate the outlook for this spring and summer, with little chance of prices showing their normal seasonal strength during the latter part of the year.

This is the way USDA officials are looking at the soybean price situation, now that the April stocks reports are available.

The large supply of beans still on hand this spring has to be moved somewhere, or pile up in unnecessarily large carryover at the close of the marketing season.

The situation is pretty well illustrated by the figures on Apr. 1 stocks of soybeans on farms. Farm stocks on this date total about 115 million bushels.

The increase in farm stocks Apr. 1 over a year before was 77 million bushels—almost equalling the 74-million-bushel increase in size of the 1955 crop over the crop last year.

Disappearance so far this year has run only a little ahead of use during the same period a year ago.

The crush of soybeans this season is estimated by USDA at approximately 250 million bushels. Exports through March had totaled very close to 40 million bushels — well ahead of a year ago. It's figured that exports of 2½ million bushels a month for the last six months of the season would represent a good-sized movement for this time of year.

This volume of exports for the balance of the year would make a total of 55 million bushels—topping last year's total by around 15 million bushels. It would still mean a carryover next fall, however, of around 12 million bushels—a record.

Government policy on takeover of soybeans this spring could have some effect on total exports, however.

Out of 41 million bushels placed under price support, 19 million bushels were in warehouse loans. Unless these loans are redeemed by May 31, Commodity Credit Corp. will automatically take over the beans at the going market price.

So far, very few soybean loans have been reported as redeemed. Officials are a little surprised at this, especialiy in the case of farm-stored loans, which give the producer no advantage in price if the market is higher than the loan rate.

Though it is not yet policy in USDA, there has been some discussion of making soybeans taken over by CCC available for export under the special export program—public law 480. Such action would put some soybeans within the reach of foreign countries in exchange for their own currency instead of U. S. dollars, and could be expected to increase total shipments.

An offsetting factor is the prospect for a larger soybean crop in 1955, and a lower price support rate, which will have a bearish influence on the market toward the end of the present crop year.

If anything like the indicated acreage is planted, there would be little incentive, officials think, for processors or growers to carry over more than minimum stocks.

The tremendous hold-back of soybeans by growers last fall surprised nearly everyone, and did an unusually good job of stabilizing prices during the first half or more of the marketing season.

As the outlook is sized up here a little past the midway point of the marketing year, some loss of ground in price is to be expected. Prices are not figured to run within such a narrow range as $2.54 to $2.61 as they did during the first half of the year. For the year as a whole, however, growers may receive more than they would have with a rush of marketings last fall.

MEAL. The usual rise in soybean oil meal prices may be held down or prevented entirely this spring and summer by the larger supply of meal indicated by estimates of total crushings.

A crush of beans totalling 250 million bushels for the season, as now estimated, would supply about 5 percent more soybean oil meal this spring and summer than during the previous high in 1951. It would be around 25 percent more than the comparatively small quantity last year.

Supplies of high protein feeds will be maintained at high levels during the 1955-56 feeding season, officials say, based on planting indications this spring.

They are estimating total production of oilseed cake and meal at around 9 million tons, or close to the level anticipated this year.

Soybean oil meal output next season may exceed this year's high total, officials estimate, running higher than 6 million tons. Output of cottonseed cake and meal, however is expected to be smaller by around 15 percent. Production of linseed meal next season is figured at about the same as this year.

ATTACHE. The man who will have charge of initiating U. S. negotiations for sale of soybeans to Japan in the future is William D. Termohlen of Iowa, former Iowa State College extension service poultry specialist, and former head of the poul-

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try division of Commodity Stabilization Service.

Termohlen is the new agricultural attache to Japan, replacing Wolf Ladejinsky who was one of the central figures in the controversy over security risk firings in USDA. Ladejinsky is now on special assignment by the Foreign Operations Administration to Indonesia.

Termohlen sailed for his new post Apr. 10.

Feed Supply Same

BASED on indications in early March, the total supply of high-protein feeds in 1955-56 probably will be maintained at about the same level as for the 1954-55 season, reports Agricultural Marketing Service. The total production of oilseed cake and meal, with an average growing season for oilseed crops this year, probably would again be around 9 million tons, or close to the level expected this year.

With a larger acreage of soybeans in prospect, the supply of soybean meal in 1955-56 probably will be at record level, exceeding the production of a little under 6 million tons expected this year.

The output of cottonseed cake and meal, on the other hand, is expected to be somewhat smaller than in 1954-55, since the acreage allotment for cotton has been reduced by about 15 percent.

The prospective flaxseed acreage is 5.7 million acres, a little under last year's large acreage, but with average yields per acre (they were below average last year) the crop would be the largest since 1948. The production of linseed meal in 1955-56 will probably be at least as large as for the current season.

I. P. Order on Beans

THE BOARD of commissioners of the Port of New Orleans have ruled that, effective immediately, all Illinois soybeans will be pooled and stored separately from beans of any other origin, with identity preserved, W. L. Richeson & Sons, Inc., New Orleans, has reported.

All Minnesota soybeans will also be pooled and stored separately at the New Orleans Public Grain Elevator. All other beans originating elsewhere will be considered as ordinary, and will be pooled and stored separately.

Shippers or accounts for whom pooled Illinois and Minnesota beans are pooled and stowed will not be required to pay any identity preserved charges, it is reported. However, if shippers require specific cars or barges of Illinois or Minnesota soybeans held identity preserved, the charge of ½-cent-per-bushel I. P. storage will be assessed.

New-Style Contracts

MEMBERSHIP of the Chicago Board of Trade balloted May 2 to establish price differentials at which various grades of soybeans may be delivered on "new style" soybean futures contracts maturing September 1955 and later.

The proposed new rule would establish U. S. No. 2 yellow soybeans as the contract grade. U. S. No. 1 yellow would be applicable on new style futures contracts as a premium of 3 cents per bushel over contract price; No. 3 yellow, carrying 14 percent or less moisture, would carry a 2-cent-per-bushel discount and No. 3 yellow in excess of 14 percent moisture, would be discounted 5 cents per bushel under contract price.

U. S. No. 1 Yellow Soybeans

Old Contract	Proposed New Contract
Contract Price	Permium of 3c perbu.

U. S. No. 2 Yellow Soybeans

Old Contract	Proposed New Contract
Contract Price	Contract Price

U. S. No. 3 Yellow Soybeans—14% or less moisture

Old Contract	Proposed New Contract
Discount of 4c per bu.	Discount of 2c per bu.

U. S. No. 3 Yellow Soybeans—over14% moisture

Old Contract	Proposed New Contract
Discount of 4c per bu.	Discount of 5c per bu.

Furnished by Merrill Lynch, Pierce, Fenner & Beane

Job-Lot Units

The Chicago Board of Trade has approved a proposal to set 1,000 bushels as the job-lot unit of trade on wheat, corn, soybeans and rye futures contracts that mature beginning with Mar. 11, 1956, Robert C. Liebenow, executive secretary, has announced.

Market Street

We invite the readers of THE SOYBEAN DIGEST to use MARKET STREET for their classified advertising. If you have processing machinery, laboratory equipment, soybean seed, or other items of interest to the industry, advertise them here.

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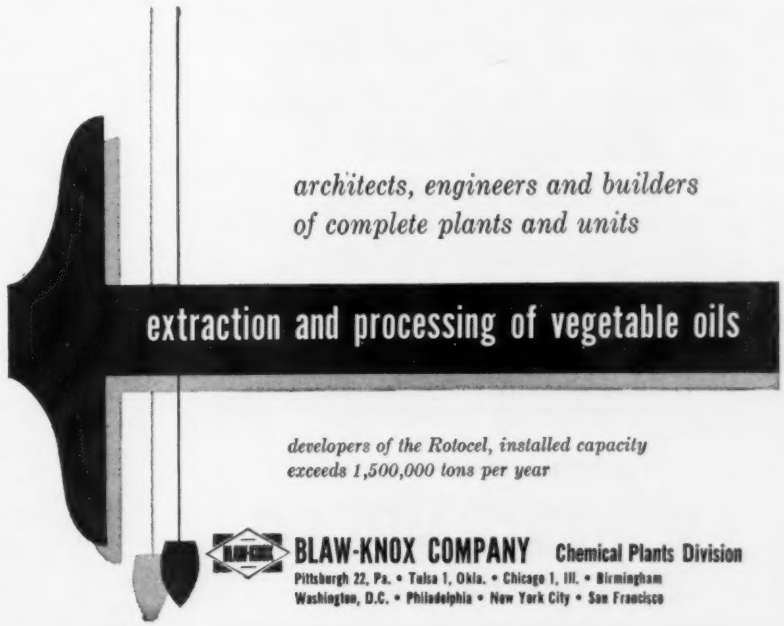
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IN THE MARKETS

STOCKS ON FARMS. Soybean stocks on farms Apr. 1 are estimated at nearly 115 million bushels, the largest of record for Apr. 1, according to the crop reporting board of Agricultural Marketing Service, USDA. This compares with the low stocks of 37.3 million bushels on farms a year ago and the 10-year average of 42 million bushels. The high farm stocks are due not only to the record production, but also to the tendency of many growers to hold soybeans for higher prices.

Disappearance of soybeans from farms during the January-March quarter totaled 35.5 million bushels. In the like quarter last year, 44.3 million bushels moved off farms from a much smaller supply. The 10-year average disappearance for the quarter is 23.5 million bushels.

Farm stocks of soybeans are larger than on last Apr. 1 in all producing areas. Especially heavy farm stocks are reported in the North Central area, which accounts for 96 percent of the total. Illinois, the largest producing state, also has the most soybeans remaining on farms—31 million bushels. Iowa is second with almost 22 million bushels, followed by Minnesota and Indiana, each with about 16 million bushels on farms Apr. 1. Nearly all producing states, except possibly Oklahoma which had a near complete failure last year, have ample supplies on farms to meet expected seed requirements.

SOYBEAN STOCKS ON FARMS ON APR. 1 (1,000 bu.)

State	Average 1944-53	1954	1955	State	Average 1944-53	1954	1955
N. Y.	46	16	26	Md.	215	180	440
N. J.	91	73	137	Va.	382	374	522
Pa.	138	113	70	N. C.	843	611	614
Ohio	4,612	3,186	11,586	S. C.	142	286	318
Ind.	5,888	4,176	15,684	Ga.	53	135	84
Ill.	12,882	9,461	31,353	Fla.	.....	5	24
Mich.	536	293	1,147	Ky.	312	175	410
Wis.	195	162	331	Tenn.	256	263	259
Minn.	2,896	4,985	16,072	Ala.	78	94	60
Iowa	8,334	6,769	21,801	Miss.	491	360	493
Mo.	2,328	3,246	7,987	Ark.	498	732	1,182
N. Dak.	50	93	429	La.	57	13	42
S. Dak.	169	413	1,401	Okla.	36	45	3
Nebr.	90	291	1,338	Texas	.....	.....	3
Kans.	490	635	710				
Del.	214	127	250	U. S.	42,330	37,312	114,776

SUPPLY AND DISTRIBUTION of the 1953 and 1954 soybean crops, reported by Agricultural Marketing Service (1,000 bu.)

	1953-54	1954-55
Carryover (1)	10,137	1,336
Production	268,528	342,795
Total supply (2)	278,665	344,131
Farm use including seed for season	27,000	28,000
Quantity remaining for processing, export, or carryover	251,665	316,131
Disappearance through Feb. 28 (3):		
Crushed for oil or processed (4)	101,977	106,374
Exported	29,780	35,926
Total	131,757	142,300
Balance on Mar. 1 for processing, export, or carryover	119,908	173,831

(1) Stocks as of Oct. 1. (2) Imports negligible. (3) October through February. (4) No allowance is made for new crop crushings prior to Oct. 1.

STOCKS. Agricultural Marketing Service's commercial grain stocks reports (1,000 bu.)

	Mar. 29	Apr. 5	Apr. 12	Apr. 19
U. S. Soybeans in Store and Afloat at Domestic Markets				
Atlantic Coast	251	253	204	251
Gulf Coast	1,271	953	1,088	812
Northwestern and Upper Lake	330	927	843	895
Lower Lake	1,568	1,510	1,241	753
East Central	488	469	425	380
West Central Southwestern & Western	242	205	187	194
Total current week	4,150	4,317	3,988	3,285
Total year ago	12,296	11,461	10,605	10,023
U. S. Soybeans in Store and Afloat at Canadian Markets				
Total current week	95	95	95	95
Total year ago	67	38	0	64
Total North American Commercial Soybean Stocks				
Current week	4,245	4,412	4,083	3,380
Year ago	12,363	11,499	10,605	10,087

Stocks as reported are at the close of business on Friday or Saturday preceding the date of the report.

FACTORY USE VEGETABLE OILS for January and February as reported by Bureau of the Census (1,000 lbs.)

PRIMARY MATERIALS: FACTORY PRODUCTION AND CONSUMPTION, AND FACTORY AND WAREHOUSE STOCKS, FEBRUARY 1955—JANUARY 1955

	Factory production		Factory consumption		Factory and warehouse stocks	
	Feb. 1955	Jan. 1955	Feb. 1955	Jan. 1955	Feb. 28 1955	Jan.31 1955
Cottonseed, crude,	169,946	196,278	151,001	169,197	145,221	141,494
Cottonseed, refined	141,252	159,433	141,288	144,295	(1) 545,824	660,701
Peanut, crude (2)	2,197	2,096	4,763	4,143	10,068	6,788
Peanut, refined	4,442	3,895	2,852	2,870	9,774	6,049
Corn, crude	20,656	21,039	20,836	23,539	14,155	12,898
Corn, refined	19,530	21,962	17,206	19,824	5,673	4,894
Soybean, crude	214,068	230,957	204,346	222,134	128,114	118,602
Soybean, refined	187,174	205,325	185,616	192,795	73,078	80,090
Vegetable foots, (100% basis)	19,772	20,133	11,479	14,158	48,287	44,675

(1) Includes 334 million pounds of refined cottonseed oil reported by respondents to the Census Bureau as owned by Commodity Credit Corp. This figure, as well as the comparable Jan. 31, 1955, figure of 456 million pounds, includes quantities sold for export by CCC but not "lifted." As of Feb. 28, CCC reported that it had removed from inventory and put in an "in-transit position to other storage" about 35 million pounds of refined cottonseed oil, of which it is estimated that about 2 million pounds have not been accounted for in respondent reports to the Census Bureau. (2) Data on production and stocks held at crude oil mill locations collected by Agricultural Marketing Service, U. S. Department of Agriculture.

FACTORY CONSUMPTION OF VEGETABLE OILS, BY USES,, DURING FEBRUARY 1955 (1,000 lbs.)

	Edible products			Inedible products			
	Shortening	Margarine	Other edible	Soap	Paint and varnish	Lubricants and similar oils	Other inedible
Cottonseed, refined	18,274	4,242	1,175	.....	.....	.....	182
Soybean, crude	.....	.....	.....	43	455	.....	2,467
Soybean, refined	40,701	5,847	8,405	.....	6,476	16	6,155
Foots, vegetable, raw and acidulated (100% basis)	.....	.....	.....	2,368	143	.....	536
Hydrogenated vegetable oils, edible:							
Cottonseed	22,434	21,052	.....	.....	.....	.....	.....
Soybean	34,407	57,697	.....	.....	.....	.....	.....
Other	1,657	1,174	1,487	.....	.....	.....	.....

CONSUMPTION OF PRIMARY FATS AND OILS IN FAT SPLITTING (1,000 lbs.)

	1955			1954	
	Feb.	Jan.	Jan.-Feb. Cumulative	Feb.	Jan.-Feb. Cumulative
Vegetable					
Coconut, crude	3,131	1,736	4,867	6,005	9,805
Other vegetable	1,747	1,749	3,496	1,016	2,413
Soapstocks					
Vegetable foots	7,621	9,324	16,945	10,170	20,974

Source: U. S. Census Bureau.

INSPECTIONS. Soybeans, inspected by grades and percent, as reported by USDA's Agricultural Marketing Service.

Grade	Oct.-Mar. 1953-54		Oct.-Mar. 1954-55		March 1954		February 1955		March 1955 (2)	
	1,000 bu.	%	1,000 bu.	%	1,000 bu.	%	1,000 bu.	%	1,000 bu.	%
No. 1	51,548	29	22,595	15	5,046	35	2,038	20	2,188	20
No. 2	72,984	41	77,141	50	6,358	44	5,202	51	6,682	59
No. 3	25,773	14	38,112	25	1,606	11	1,985	19	1,683	15
No. 4	18,402	10	10,643	7	890	6	568	5	483	4
Sample	11,123	6	4,994	3	491	4	482	5	261	2
Total	179,830	100	153,485	100	14,391	100	10,275	100	11,297	100

(1) Carlot receipts have been converted to bushels on the basis that 1 carlot equals 1,750 bushels. (2) Of the March 1955 receipts, 300 bushels were Black and the remainder Yellow soybeans. Inspections of soybeans in March included 2,040,000 bushels as cargo lots, 430,384 bushels as truck receipts, and the balance as carlot receipts.. Based on reports of inspections by licensed grain inspectors at all markets.

SHORTENING. Standard shortening shipments reported by the Institute of Shortening and Edible Oils, Inc., in pounds.

March 26	3,972,333
April 2	4,429,200
April 9	5,041,832
April 16	4,726,612

Grand total of shortening and edible oil shipments for the first quarter totaled 1,023,764,000 pounds; for March 355,904,000 pounds compared with 317,762,000 pounds for February.

SEED IMPORTS. Soybean seed imports admitted into the U. S. under the federal seed act in the period from July 1, 1954, to Mar. 31, 1955, totaled 19,800 pounds compared with 258,600 pounds for the same period a year earlier, reports Agricultural Marketing Service.

All this year's imports have been from Canada.

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PROTEIN FEEDS (Canada). Preliminary data indicate that total supplies of high protein feeds available to Canadian feeders in 1954 exceeded supplies available in 1953 and 1952 by about 12 percent and 14 percent respectively, reports the Dominion Bureau of Statistics.

Protein supplies of vegetable origin accounted for some 76 percent of the total.

Production of soybean oil meal, the largest single component of Canadian high protein feeds, amounted to 222,046 tons in 1954, an increase of 19,465 tons over the 1953 output. Domestic production was supplemented by imports of 41,414 tons. Exports amounting to 64,083 tons were below the 1953 level of 73,672 tons.

PRELIMINARY ESTIMATE OF VEGETABLE PROTEIN FEED SUPPLIES AVAILABLE IN 1954 WITH COMPARATIVE FIGURES FOR 1952 AND 1953 (Tons)

	1952 (Revised)	1953 (Revised)	1954 (Prelim.)
Linseed oil meal	59,400	45,300	53,600
Soybean oil meal	162,700	165,500	203,400
Other oil meals and gluten feed	44,100	44,200	50,000
Malt sprouts	10,000	9,600	9,500
Brewers' and distillers' dried grains	49,100	56,400	60,000
Total Vegetable Protein	325,300	321,000	376,500

OILSEED CAKES AND MEALS: SUPPLIES FOR FEED OCTOBER-DECEMBER 1954 WITH COMPARISONS (1,000 tons)

	Oct.-Dec. 1953	Oct.-Dec. 1954	Oct. 1952-Sept. 1953	Oct. 1953-Sept. 1954	1954-55 Est.
Soybean	1,390.2	1,388.9	5,510.3	4,964.9	6,000.0
Cottonseed	1,068.0	856.4	2,671.1	2,885.2	2,450.0
Linseed	131.8	142.0	478.2	526.5	550.0
Peanut	14.1	6.4	44.3	62.8	25.0
Copra	52.9	51.0	213.8	196.5	200.0
Total oilseed meals	2,657.0	2,444.7	8,917.7	8,635.9	9,225.0

EXPORTS. U. S. exports of soybeans and soybean oil for February, as reported by the Foreign Agricultural Service of the U. S. Department of Agriculture.

Soybeans	3,837,574 bu.
Soybean oil	
Crude	449,910 lbs.
Refined, but not further processed	1,417,494 lbs.
Refined, deodorized and hydrogenated	567,646 lbs.

Converted to a soybean equivalent basis the exports for February amounted to 4,070,193 bushels.

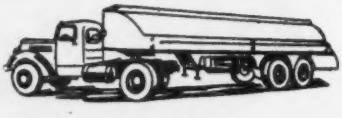
Foregoing is based on an oil extraction rate of 18.3 percent. Following are monthly export totals for 1954 crop based on a soybean equivalent of 18.3 percent instead of the 17.5 percent previously used.

October 1954	6,908,108 bu.
November 1954	12,860,575 bu.
December 1954	8,696,000 bu.
January 1955	5,528,770 bu.

Exports of Soybeans, Soybean Oil and Oil Cake and Meal for October 1954 Through January 1955 and for Comparable Period Last Year.

	1954-55 (pounds)	1953-54 (pounds)	1954-55 (bushel)	1953-54 (bushel)
Soybeans			32,426,035	27,278,645
Soybean cake and meal	264,916,000	79,024,000		
Meal equivalent in bean bushel			5,636,511	1,681,362
Soybean oil crude	25,985,169	8,046,725		
Soybean oil refined	8,945,937	3,308,537		
Soybean oil refined deodorized, & hydrogenated	704,270	424,519		
Total soybean oil exported	35,635,376	11,779,781		

By adding soybean meal exported in bean equivalent to the actual soybeans exported, we have a total of 38,062,546 bushels or a little over 11 percent of the 1954-55 crop exported in the first four months. Soybean oils exported first four months in bean equivalent totaled 3,281,355 bushels compared with 1,067,141 comparable period last year. Calculations are based on 11 pounds oil crude, 10.5 refined,, and 47 pounds meal per bushel of beans. Reported by Agricultural Marketing Service.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PROCESSING OPERATIONS. Reported by Bureau of the Census for 1953 and 1954.

SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, PRELIMINARY TOTALS FOR 1954

State	Crude oil (thousand pounds) Production		Crude oil (thousand pounds) Stocks Dec. 31,		Cake and meal (tons) Production		Cake and meal (tons) Stocks Dec.31,	
	1954	1953	1954	1953	1954	1953	1954	1953
U. S.	2,377,885	2,514,829	25,481	36,463	5,060,969	5,467,624	47,104	104,835
Arkansas	7,811	22,434	(1)	(1)	20,859	56,289	6,586	1,290
Illinois	970,590	1,025,277	9,180	12,802	1,919,282	2,068,885	15,906	51,524
Indiana	279,961	297,981	2,225	6,433	611,337	651,960	2,874	(1)
Iowa	430,458	430,378	4,655	5,372	954,601	986,573	6,768	7,413
Kansas	24,857	42,144	(1)	701	57,337	98,766	(1)	(1)
Kentucky	61,690	59,430	266	328	131,574	126,472	882	(1)
Minnesota	146,788	120,710	2,392	2,518	335,013	284,802	3,193	3,936
Mississippi	20,015	22,144	398	(1)	45,460	49,015	838	468
Missouri	95,335	74,114	910	1,569	208,468	169,203	1,280	1,202
Nebraska	(1)	18,025	(1)	535	(1)	47,918	(1)	(1)
N. Carolina	(1)	10,971	(1)	303	6,166	32,127	784	4,355
Ohio	249,393	282,801	2,961	3,789	562,184	631,402	3,345	3,186
Oklahoma	.....	6,401	.....	(1)	.....	17,593	.....	(1)
Texas	.....	6,007	.....	.....	.....	15,276	.....	.....
All other	90,987	96,012	2,494	2,113	208,679	231,343	4,648	31,461

(1) Included in "All other" to avoid disclosure of figures for individual companies. Prepared by Bureau of the Census, Industry Division, Chemicals Section.

SOYBEANS: RECEIPTS, CRUSHINGS, AND STOCKS AT OIL MILLS, BY STATES, PRELIMINARY TOTALS FOR 1954

(Tons of 2,000 Pounds)

State	Receipts at Mills 1954	Receipts at Mills 1953	Crushed or Used 1954	Crushed or Used 1953	Stocks at Mills Dec. 31, 1954	Stocks at Mills Dec. 31, 1953
U. S.	6,060,826	6,285,255	6,478,364	6,924,890	1,338,382	1,755,920
Arkansas	49,529	(1)	26,498	70,738	67,924	44,893
Illinois	2,336,147	2,518,092	2,580,643	2,729,053	441,372	685,868
Indiana	713,584	797,046	786,584	811,017	153,677	186,677
Iowa	1,092,600	1,189,383	1,180,488	1,206,124	175,717	263,605
Kansas	64,286	122,720	70,195	118,256	(2)	18,900
Kentucky	149,009	163,120	164,870	159,334	(2)	68,674
Minnesota	409,766	332,148	417,058	352,834	24,057	31,349
Mississippi	67,367	18,582	56,116	61,350	36,234	24,983
Missouri	297,228	177,743	259,570	207,558	91,549	53,891
Nebraska	(2)	45,274	(2)	56,620	(2)	(2)
N. Carolina	(2)	1,064	(2)	39,995	7,408	6,108
Ohio	603,581	753,904	697,299	785,957	148,518	242,236
Oklahoma	(2)	1,365	.....	21,997	(2)	(2)
Texas	.....	13,497	.....	16,674	.....	.....
All other	277,729	191,770	269,043	287,383	191,926	118(736

(1) Receipts exceeded by reshipments of beans previously received and held in the State. U. S. receipts are on net basis, excluding transfers between the mills. (2) Included in "All other" to avoid disclosure of figures for individual companies. Prepared by Bureau of the Census, Industry Division, Chemicals Section.

PRICES. Average price for soybeans received by farmers, effective parity price and price support rates (dollars per bu.). Reported by Agricultural Marketing Service, USDA.

Average farm price			Effective parity	Av. price as percent of parity	National average price support rate		
Mar. 15 1954	Feb. 15 1955	Mar. 15 1955	Mar. 15 1955	Mar. 15 1955	1953 crop	1954 crop	1955 crop
3.22	2.61	2.54	2.93	87	2.56	2.22	2.04

Average farm and parity prices from crop reporting board.

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Chicago 4, Ill.

PROCESSING OPERATIONS. Reported by Bureau of the Census for February and March.

PRIMARY PRODUCTS EXCEPT CRUDE OIL AT CRUDE OIL MILL LOCATIONS: PRODUCTION, SHIPMENTS AND TRANSFERS, AND STOCKS, MARCH 1955 - FEBRUARY 1955

(All figures in short tons of 2,000 pounds)

Products	Production		Shipments and transfers		Stocks end of month	
	Mar. 1955	Feb. 1955	Mar. 1955	Feb. 1955	Mar. 31 1955	Feb. 28 1955
Soybean:						
Cake and meal	444,323	450,500	434,939	419,028	100,352	90,968
Flour	9,043	10,643	9,140	10,776	2,926	3,023

SOYBEANS: NET RECEIPTS, CRUSHINGS, AND STOCKS AT OIL MILLS, BY STATES, MARCH 1955 - FEBRUARY 1955

(Tons of 2,000 pounds)

State	Net receipts at mills		Crushel or used		Stocks at mills	
	Mar. 1955	Feb. 1955	Mar. 1955	Feb. 1955	Mar. 31 1955	Feb. 28 1955
U. S.	381,593	326,656	585,750	593,298	526,484	730,639
Illinois	164,254	148,267	238,089	257,524	133,337	207,172
Indiana	26,332	20,782	52,656	55,901	37,387	63,711
Iowa	72,511	61,450	94,322	96,100	57,105	78,916
Kansas	(1)	(1)	(1)	(1)	(1)	(1)
Kentucky	6,161	10,680	(1)	15,469	(1)	(1)
Minnesota	39,187	35,204	41,615	38,128	12,912	15,340
Missouri	9,646	5,512	25,028	22,356	42,759	58,141
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)
North Carolina	(1)	191	(1)	(1)	(1)	(1)
Ohio	48,141	31,315	61,495	57,667	68,742	82,096
All other	15,363	13,255	72,545	50,153	174,242	225,263

SOYBEAN PRODUCTS: PRODUCTION AND STOCKS AT OIL MILL LOCATIONS, BY STATES, MARCH 1955 - FEBRUARY 1955

State	Crude Oil (Thousands of Pounds)				Cake and Meal (Tons)			
	Production		Stocks		Production		Stocks	
	Mar. 1955	Feb. 1955	Mar. 31 1955	Feb. 28 1955	Mar. 1955	Feb. 1955	Mar. 31 1955	Feb. 28 1955
U. S.	210,643	214,068	42,544	45,828	444,323	450,500	100,352	90,968
Illinois	88,035	95,900	15,733	16,299	172,808	189,584	49,740	38,292
Indiana	19,234	20,518	4,160	6,015	40,367	43,120	4,451	6,910
Iowa	32,787	33,925	7,087	8,169	74,097	75,051	18,447	17,222
Kansas	(1)	(1)	(1)	475	(1)	(1)	260	(1)
Kentucky	(1)	5,733	893	709	(1)	12,023	900	1,348
Minnesota	14,275	12,840	3,601	3,607	31,929	29,094	(1)	5,119
Missouri	9,557	8,031	1,409	1,571	19,537	17,371	2,558	2,169
Nebraska	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
N. Car.	(1)	(1)	(1)	227	(1)	(1)	1,320	1,454
Ohio	21,532	20,194	3,007	3,480	48,180	44,940	2,472	2,986
All other	25,223	16,927	6,654	5,276	57,405	39,317	20,204	15,468

(1) Included in "all other" to avoid disclosure by individual companies.

STOCKS. Soybean stocks in all storage positions on Apr. 1 totaled nearly 177 million bushels, the largest stocks of record for this date, according to reports assembled by the crop reporting board. This quantity compares with 177 million bushels held a year ago and 117 million bushels in all storages on Apr. 1, 1953.

Current totals include farm stocks of nearly 115 million bushels and interior mill and elevator stocks of almost 41 million bushels, both as estimated by the Crop Reporting Board. Farm stocks are over three times as large as a year ago, while interior mill and elevator stocks are about 2½ times those of last Apr. 1.

U. S. STOCKS OF SOYBEANS, APR. 1, 1955, WITH COMPARISONS

Position	Reported by	Apr. 1 1953	Apr. 1 1954	Jan. 1 1955	Apr. 1 1955
		Thousand bushels			
On farms	Crop Reporting Board	59,669	37,312	150,267	114,776
Terminals	Grain Division AMS	9,048	11,461	8,534	3,914
Com. Credit Corp. (1)	Com. Credit Corp.	815	36	0	0
Processing Plants	Bureau of the Census	49,613	52,297	44,613	17,549
Int. Mills, Elev. & Whses. (2)	Crop Reporting Board	27,926	16,862	57,804	40,649
TOTAL		147,071	117,968	261,218	176,888

(1) Owned by CCC in transit or stored in their own bins. (2) All off-farm storages not otherwise designated.

STOCKS OF SOYBEANS, BY STATES, APR. 1, 1954 and 1955

State	Off-farm total		All positions	
	Apr. 1 1954	Apr. 1 1955	Apr. 1 1954	Apr. 1 1955
	Thousand bushels			
Ohio	7,689	6,211	10,875	17,797
Indiana	5,482	3,953	9,658	19,637
Illinois	31,857	18,603	41,318	49,956
Minnesota	4,689	8,493	9,674	24,565
Iowa	15,797	13,547	22,566	33,348
Missouri	3,146	2,578	6,392	10,565
Nebraska	.....	570	.....	1,908
Kansas	1,677	266	2,312	976
North Carolina	.....	184	.....	798
Arkansas	.....	325	.....	1,507
All Other	10,319	7,382	15,173	13,831
U. S.	80,656	62,112	117,968	176,888

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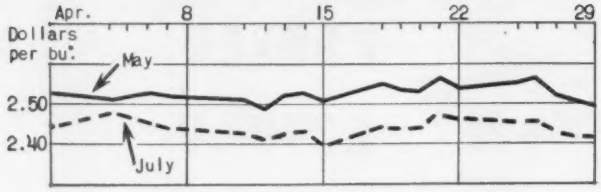
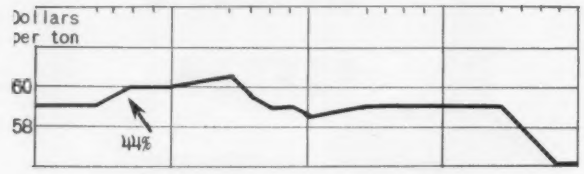
DAILY MARKET PRICES

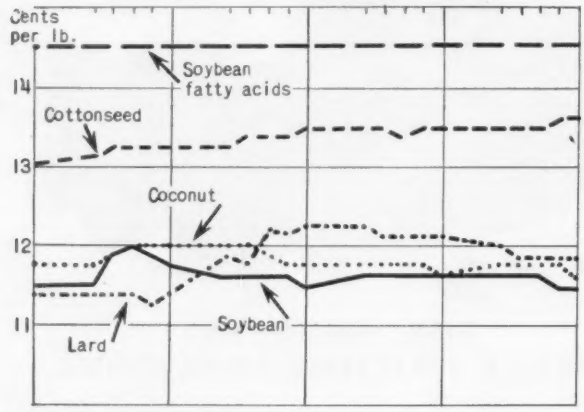
Futures No. 2 Soybeans, Chicago



Bulk Soybean Oil Meal, Decatur



Crude Vegetable Oils and Lard, Tankcars



April Markets

THERE was little net change in soybean or oil prices for the month and meal was off $3.

May futures on May 1 were about $1.60 below the year earlier price, when the peak for the 1953 crop was reached, and reflected a slide of a year's duration. Meal prices during April reached the lowest point since late 1953.

The scarcity of supplies in terminal storage continued to be balanced by so-called abundance of beans on farms. The government report of record farm stocks on Apr. 1 was a bearish influence.

There were reports of somewhat greater movement from the farm in late April. Belief in the trade that movement would increase in coming weeks affected the psychology of buyers of both meal and oil. They continued to buy hand-to-mouth in expectation of cheaper and more abundant supplies later.

Processors were reported to be buying enough soybeans for current needs, but country movement was still far from general, according to reports to the Soybean Digest. Traders said country movemnt was not extremely large but was increasing.

Soybean oil meal on the whole continued in slow request, with offerings in excess of the limited demand much of the time. Soybean oil trading was light, with both buyers and sellers wary.

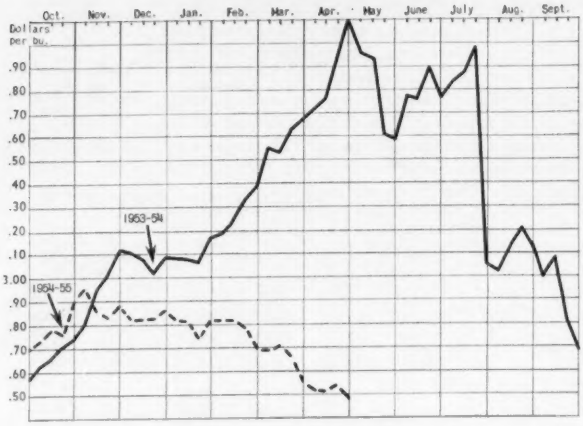
EXPORTS. Agricultural Marketing Service of USDA reported 38.1 million bushels of soybeans inspected for export or shipped to Canada during the current marketing year to April 16. This compares with 32.2 million bushels for the same period a year ago.

The Japanese Food Board reportedly has arrived at a plan to import 240,000 tons of soybeans during the first half of fiscal 1955, according to Trade News Service, New York. Usage will be divided between production of fats and oils, foodstuffs and livestock feed.

SOAP STOCKS. Acid soybean soap stocks delivered Midwest advanced from 5½ to 5⅞ cents a pound in April. Raw soybean soap stocks declined from 2½ to 2 cents a pound.

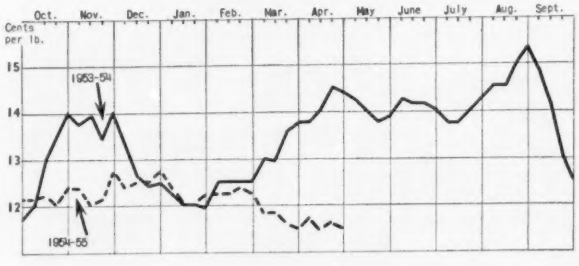
TRENDS AT A GLANCE (Friday prices)

Near Futures Soybeans, Chicago



Bulk Soybean Oil Meal, Decatur

Crude Soybean Oil, Tankcars



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